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DOMESTIC PETROLEUM INDUSTRY OUTLOOK

HEARINGS

BEFORE THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON THE

DOMESTIC PETROLEUM INDUSTRY OUTLOOK

LAFAYETTE, LA, FEBRUARY 9, 1987
HOBBS, NM, FEBRUARY 28, 1987
FARMINGTON, NM, MARCH 2, 1987

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DOMESTIC PETROLEUM INDUSTRY OUTLOOK

MONDAY, FEBRUARY 9, 1987

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Lafayette, LA.

The committee met, pursuant to notice, at 9:32 a.m., in the Mardi Gras Room, Cajundome, Lafayette, LA, Hon. J. Bennett Johnston, chairman, presiding.

OPENING STATEMENT OF HON. J. BENNETT JOHNSTON, A U.S. SENATOR FROM THE STATE OF LOUISIANA

The CHAIRMAN. The Senate Committee on Energy and Natural Resources will come to order.

First of all, I want to thank all of those who have made this hearing possible. This is a vitally important hearing, not just for the Senate Energy and Natural Resources Committee but for the United States. By your presence here you are demonstrating your interest in what I consider to be one of the most vital questions facing the U.S. today and that is the question of, "Do we need a domestic oil and gas industry?"

Frankly, there are a lot of people in this country who say we don't need a domestic oil and gas industry. They say that there's plenty of oil in the Middle East and that we can rely upon the Middle East to produce that oil. There's no need to subsidize a domestic industry, as they put it, because there's plenty of oil, there's a world of oil surplus. Those people are wrong. They are dead wrong.

What we're going to develop today is the factual basis in order to answer those questions.

We began our hearings in January and examined the geopolitical side of that question. We had witnesses from the C.I.A. who testified. We had former Secretary of Defense and Secretary of Energy James Schlesinger to speak about what's happening in the Middle East, what's likely to happen, and what America's stake in that world game is.

We had other witnesses such as former Ambassador to Saudi Arabia James Akins to testify as to what direction OPEC in the Middle East is going in.

In the future we'll hold hearings on the question of what we can do about the problem specifically in terms of legislation. If we have an oil import fee, how should that oil import fee be structured? Should there be a differential for product and for petrochemicals for our hemispheric partners such as Canada, Mexico and Venezuela? In effect, we will detail what kind of legislation would preserve the domestic oil industry.

But today we are concerned with two questions: First what is happening to the domestic oil industry? What is the affect of this national policy (or lack of it) upon people in the oil patch; the workers, companies, service companies, drill bit companies, mud companies, roughnecks; the whole gambit of people who work in the oil industry? We're going to be hearing today from witnesses who'll tell us what's happening to them.

Second, we'll hear from witnesses who'll tell us what we need to do, what steps we need to take to preserve domestic independence. We'll hear from not only small independents but larger independents, bankers and others, who'll tell us what it is that needs to be done to preserve this industry.

It's going to be a very interesting and very vital set of hearings this morning.

[The prepared statement of Senator Johnston follows:]

Opening Statement by Senator J. Bennett Johnston
Chairman
Committee on Energy and Natural Resources
United States Senate

Hearing on the Viability of the Domestic Oil and Gas Industry
February 9, 1987 - Lafayette, Louisiana

Ladies and Gentlemen:

Let me describe the situation facing us today. Domestic crude oil production plummeted last year, going from 9.056 million barrels per day in January, 1986, to 8.350 million barrels per day in January, 1987.

If you add in natural gas liquids, we lost a million barrels per day of production last year, according to Petroleum Intelligence Weekly (Jan. 19, 1987).

The situation is likely to continue to deteriorate.

Most of the production we have lost won't come back. Once a stripper well is shut in, for example, it is shut in forever. Production from Prudhoe Bay, which represents about 20% of our domestic supply, will begin to decline significantly around 1990. And we are doing nothing now to replace that production.

We are losing our ability to increase production once prices recover because of the fact that we are dismantling our domestic production and exploration capability. That seems to me to be especially disturbing.

One need only look at the shape of things here in Louisiana to see the tangible effects of this. Louisiana is our nation's third largest producer of oil and second largest producer of natural gas. Sixty-two of our sixty-four parishes are involved in oil and gas production. In January, 1987, that number had decreased to 53,000, meaning that in a one year period, we lost 23,000 jobs that were directly related to production activity and many, many thousands more in secondary and support industries.

Activity of this nature has given our state the dubious honor of having the nation's highest unemployment rate--13.7 percent. This rate is more than twice the national rate of 6.7 percent--and in sections of the state that are most directly involved with oil and gas and petrochemical production, the rate is even higher. For example, in Vermilion parish, the parish that produces the most oil and gas, unemployment is currently 21.6 percent. That means that more than one out of five people have lost their jobs in the past year. In LaFourche and St. Mary parishes, two other large oil and gas production areas, the unemployment rate is 18.4 percent and 23.6 percent, respectively.

This bleak economic condition is directly related to the recession in the oil and gas industry and the loss of domestic production activity. For example, as of last week, only 127 rotary drilling rigs were operating in Louisiana. One year ago, we had 245 rigs in operation. In other words, 49 percent of the rigs that were operating a year ago today are now idle.

New geologists are not going to school; those who are already trained are turning to other lines of work. Mud companies, helicopter companies, drill bit companies, pipeline manufacturing companies -- all of the service industries -- are being dismantled bit by bit and piece by piece.

The other side of the equation shows increased demand. A simple 2% annual increase in demand would take our needs from 14.5 to 16 million barrels per day in five years.

The gap between production and demand would have to be filled by imports. Imports under those assumptions (8.872 mb/d) would be 55% of our supply. And those are very conservative assumptions.

It's important to keep in mind that in 1973, when we faced the terrible oil embargo and the gas lines, we were dependent for imports for only 39.4% of our supply. Domestic production then averaged 9.2 mb/d; net imports were 6.0 mb/d.

We are just as dependent today as we were then. The first week of this year shows domestic crude production at 8.3 mb/d and net imports at 5.4 mb/d -- up 13% from a year ago -- for an import dependence level of 39.4%, the same percentage as in 1973. A simple 3% annual decline in domestic production would mean that we would be producing 7.128 million barrels per day five years from now.

What we seem to be doing is sowing the seeds for the next crisis.

And where can we turn when that crisis comes? Unless we do something in the United States we will have nowhere to turn but the Middle East. And that is why I find the situation to be so disturbing.

Last month, the Energy and Natural Resources Committee had a top secret briefing on the world oil outlook from the Central Intelligence Agency. And then we had a hearing with two world-renowned experts on the situation: James Schlesinger, Former Secretary of Energy and Defense and former Director of Central Intelligence, and James Akins, former Ambassador of the United States to Saudi Arabia.

The Senate Finance Committee Subcommittee on Energy and Agricultural Taxation also held a hearing on this same subject; they were considering oil import fee legislation. I testified at that hearing, as did experts from academia and the oil and gas industry.

All of the foreign policy experts are profoundly disturbed about the recent revelations about the United States involvement with Iran and about the potential consequences for the world oil outlook of the potential collapse of Iraq. If Iran defeats Iraq, Iran could become the dominant force in OPEC. That would have profound implications not only for energy policy, but for the very stability of the Middle East.

But our very dependence on the Middle East for oil -- and growing dependence at that -- already limits our foreign policy options in the Middle East. If we were over 55% dependent on oil imports, and if half of those imports were to come from the Persian Gulf, actions such as our raid to discipline Khaddafy could have much more negative consequences.

We must pay attention to OPEC. For we have seen the dramatic consequences of changes in Saudi Arabian production policy on all the world's oil producers, OPEC and non-OPEC alike.

Thus far, the December OPEC agreement to limit production to 15.8 mb/d, and to charge a fixed price of $18 per barrel (with differentials) appears to be sticking. The cold weather in Europe has meant that some cheating -- which is already happening -- can be tolerated. But what if the agreement falls apart? Spring will be the test. Significant cheating would lead to Saudi disciplinary production increases. That in turn would lead to another free-fall of oil prices. But who knows how far prices would fall? Production from marginal, high priced producers such as the United States would be hurt again.

Volatility is the watchword of the day.

We must pay attention to the Middle East. For nowhere else are oil reserves of any significance available and ready to be produced. Even more significantly, there is no other place in the world where the reserves are so big and the cost of production so small. It is highly unlikely that there are any such oil deposits left to be discovered anywhere. Persian Gulf oil almost certainly will be the world's most abundant and least costly conventional reserve for the remainder of the oil era.

We must pay attention to our domestic oil industry. I personally believe that an oil import fee would go a long way towards solving many of the ills of our domestic industry, while helping us to keep our dependence in line. It represents the only effective policy option I know. Revenues derived from such a fee would help our Federal budget deficit problems, and would help us to meet the Gramm Rudman deficit targets. It would also help slow increases in consumption and return us to a conservation minded Nation.

I intend to introduce my own oil import fee bill shortly. It will include a differential, or higher fee, for product imports. Such a differential is necessary to protect our vitally strategic refining capacity for two reasons:

First, foreign refiners will have access to lower cost crude supplies, and can capture a huge margin within the confines of the fee;

Second, refineries use up to 10% of their purchased crude as energy input to run the refinery itself.

In addition, I will include provisions for a differential on imported bulk petrochemicals. Otherwise, the fee could be circumvented to a significant degree through bulk chemical imports.

Finally, much has been said by opponents of a fee about the so-called adverse impacts that a fee would have on U.S. industry. Without arguing the question of whether or not those impacts would be adverse, I believe this argument misses the point. We should not be comparing our competitiveness today without a fee, versus tomorrow with a fee. We should be comparing our competitiveness tomorrow with a fee versus five years from now with no oil.

I am looking forward to hearing today's testimony.

The CHAIRMAN. Now, first of all, before I call on my distinguished colleague I want to thank the news media. Sometimes the news media and those of us in politics don't always march in exactly lock step. But I want to praise those wonderful people from the press, because you see, what we've got to do in Louisiana, New Mexico, Oklahoma, and Texas is to get this message across. It's very much like you would feel if it were December the 6th and you were in Pearl Harbor and you knew the Japanese were coming with their bombers and you wanted to get the word out. What would you do? You'd cry it from the housetops. You'd yell it down the streets. You'd get your message any place you could. In order to do it you'd need the cooperation of the news media. And we have the great cooperation of the news media today, and I want to thank them.

I want to thank our elected officials. By their presence here they have shown their solidarity and their interest in this question. I don't want to recognize all of them, because the list would be much too long.

But first of all, of course, I thank my dear friend and colleague whom I think I had a little something to do with being here, the great Senator John Breaux. [Applause.]

An outstanding Congressman who, and I really mean this sincerely, who represents this area and knows about it so well, Jimmy Hayes. [Applause.]

Someone who serves on the House Energy Committee and has built a very solid reputation in the House as being one of the real experts on energy. He's a great friend of mine and he's one of the most effective members of the House of Representatives, Congressman Billy Tauzin. [Applause.]

Now I want to thank Mayor Dud Lastrapes. Where are you, Dud? Mayor Dud Lastrapes, who's had so much to do with putting this together today.

Parish President Walter Comeaux. Where are you, Walter?

Sheriff Don Breaux. Where is Don? All of you who have helped us so much. [Applause.]

Let me introduce very quickly the outstanding members of our State Legislature who are here. Let me read all of the names and then ask you all to stand as your name is read.

Representative Kathleen Blanco, Representative Ron Gomez, Representative Danny Lemoine, Representative John Siracusa, Representative Sam Theriot, Representative Mike Thompson, Representative Dale Cittig, Representative Clyde Kimball, Senator Allen Barez, and Representative Sal Diesi.

Are there any other members of our State Legislature here?

Let's give them a good hand. [Applause.]

Senator Cecil Picard is here. Cecil, where are you? [Applause.]

And, if I may just introduce all of our elected officials, other than those who've been introduced, if you would all stand, please, and be recognized. [Applause.]

Thank you very much, gentlemen, for coming.

Now just very briefly I want to thank those who've made this possible. Gene Fortier and the Lafayette Chamber of Commerce. Gene is going to testify today. As is Carl Bauer. Raymond and Kathleen Blanco have just been terrific in helping conceive the idea, along with Carl Bauer and others, and in helping us put the whole thing together.

Our District Attorney, Nathan Stansbury, has played a big part and will play a further big part, and this deserves special recognition.

Dan Frantzen has kept this idea alive for many months. and we want to thank Dan Frantzen and the local media, as well as the national media who are here.

And most of all, we want to thank all of the good citizens of Lafayette and of the surrounding area who have turned out for this hearing, and who'll be with us at noon.

Now, with that, let me recognize a distinguished member of the Senate Energy and Natural Resources Committee. He's my very close friend. He's also a very strong American leader, a great leader for the oil business, and a great friend of Louisiana. He was the Chairman of the Senate Energy Committee—I mean of the Senate Budget Committee—last year when our so-called 8.G matter came up for consideration in the Senate.

It was touch-and-go as to whether Louisiana would get the six hundred plus million dollars, which has since been dedicated to education, or whether we would be deprived of it. There were two men in the Senate who could have said "No" and whose "No" would have been respected in spite of all of the efforts all of us from Louisiana could have made. One of those men was Senator Pete Domenici, Chairman of the Budget Committee.

By almost a wink and a smile he could have sunk our 8.G legislation. Instead, he stood shoulder-to-shoulder with John Breaux, Senator Russell Long and me, and helped make it a reality.

He's done a lot of other things for the nation that are very great, but I personally will never forget what he did for the State of Louisiana. And I imagine he won't let me forget it, either. [Laughter.]

Senator DOMENICI. Right.

The CHAIRMAN. I expect there may be a thing or two that we can think of to do for New Mexico in the process, and we'll be very glad to do it.

But, he's a great Senator, a great friend, and a great member of this Committee.

Pete, would you like to say a few words?

STATEMENT OF HON. PETE V. DOMENICI, A U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator DOMENICI. Frankly, I want you all to know that Bennett is much nicer here than back there, he doesn't let people clap in Washington. [Laughter.] Even for him. [Laughter.]

Thank you, Mr. Chairman, for those kind remarks, and for inviting me here.

Let me as a matter of personal privilege tell you that your hospitality is beyond description. The only problem is, since you knew I was only going to be here for about nine or ten hours you tried to package it all, the whole, all of your culture and everything that's wonderful in eight or nine hours. Your good friend and mine, Raymond Blanco, made sure that I upon arrival went out to Mulate's and learned about your culture. You believe that, don't you? [Laughter.]

And then at 11 o'clock at night he wanted me to learn all about your wonderful camps and university. I'm glad he has a little prestige, because I think as we drove around, walking through halls at night, and peering at all of these buildings of beauty, but for his prestige I might have ended up in jail. [Laughter.]

Now on the serious note let me say the case cannot be overstated. In 1979 the OPEC cartel caused gasoline lines. In 1986 they caused soup lines. Now they control things of the most vital significance to our future and our security. They now have a larger share of the market than they did just a year and a half ago. And if our country doesn't wake up, indeed we will wake up some morning some day totally dependent upon foreign sources of oil, and we won't be able to do anything about it.

And I can tell you, and I think that's what this hearing's about, I am not going to be part of waking up with that kind of surprise and shock on the shoulders of this country which I dearly love.

If we don't get on with minimizing our dependence, doing what we can to reestablish a vibrant American oil and gas industry growing and prospering in this country, we're in for some real difficult, difficult times.

For those of us who are from oil patch, we're already there. My state in 1982 had about seventeen thousand people in oil patch, working, earning a living, and we think it's down about nine now. Now, that's a lot, cutting it almost in half.

My state was getting about thirty-four percent of its state revenues from the production of oil and gas. And we're down to about eleven.

Now those are parochial reasons for being concerned. But there's no doubt that there is a direct relationship between a healthy oil and gas industry employing Americans, producing as much as they can, competing in the world, and permitting us to be less dependent. There is a direct relationship between that and our security and our future.

And, Mr. Chairman, that's what this hearing is about, to let a few more million people, and a few more politicians and political leaders understand that this is a bipartisan issue of high, high regard.

Things like an import fee, which is bipartisan. The Domenici bill, which your Chairman is on, has ten Senators, and they don't have any single party affiliation. They are all on board saying, "we'd better do something."

Repeal of the Fuel-Use Act is not a partisan issue, but an urgent issue. Absolute lunacy to have that kind of Act on the books of the United States when there's a natural gas glut, and the American industry is dying on the vine and the people are being put out daily to nonemployment, unemployment, and soup lines.

Thank you, Mr. Chairman. I look forward to this hearing. [Applause.]

The CHAIRMAN. Thank you very much, Senator Domenici.

I'd like to call on my colleague John Breaux for an opening statement.

STATEMENT OF HON. JOHN B. BREAUX, A U.S. SENATOR FROM THE STATE OF LOUISIANA

Senator BREAUX. Thank you very much, Mr. Chairman.

I want you to know his name may be Domenici, but he certainly sounds like a very intelligent and smart Cajun from South Louisiana, who understands the problems. And we are particularly pleased that Senator Domenici has come to Louisiana to help us in trying to assess how serious this problem is to the rest of the U.S. Senate and to the Congress at large.

I'm a little more optimistic than I was, say, a year ago. I'll tell you a couple of reasons why. One is because Bennett Johnston is Chairman of the Energy Committee. Last year's Chairman of the Energy Committee, a good and decent person did not understand the seriousness of this problem from a national perspective.

This year's Chairman of the Senate Energy Committee supports an oil import fee aimed at putting America first. Last year's Chairman did not support that.

This year's Chairman of the Senate Finance Committee, a Senator from Texas, Lloyd Bentsen, supports an oil import fee to put America's energy needs first. Last year's Chairman did not.

This year's Speaker of the House of Representatives supports an oil import fee. Last year's Speaker did not.

So there are some encouraging signs. We are here today because the Chairman has seen fit to bring this Committee to where the problem is. And this Committee is here today because America's energy policy is simply not being made in America. America's energy policy is being made in Geneva, and it's not being made by Americans. It's being made by members of OPEC.

And there's not too many people in this country, I think, that can rationally conclude that OPEC has America's best interest at heart. They have their best interest at heart.

I suggest that Senator Domenici's bill, which I am a sponsor of, which Senator Johnston is a sponsor of, is a step in the right direction. We have to convince not the people of Lafayette, Mr. Chairman, not members of your Committee; we have to convince the people at the White House, who continue to say that they believe in the free market. I think our message has to be that OPEC is not a free market. OPEC is a cartel.

OPEC was formed for one reason, and that is to fix oil prices. And they have done that well.

So I think that our message is clear. We have to send a strong signal that energy is also a part of our national security. That a country cannot be secure from a defense standpoint, from an economic standpoint, if half of our energy is being imported from a country that does not have our best interest at heart.

It's just that simple. It is not going to be an easy thing to do. We're going to have to show the White House that when you lose suppliers, when you lose mud companies, when you lose pipe companies, when you stack up drilling rights, that you cannot put them back to work the next day. If we lose our technology lead that we have, that we've given to the world, that it can't come back overnight.

So I would congratulate the Chairman, our own Senator Bennett Johnston, for having the foresight to bring the hearing here, to gather the information from the heartland, really, and to bring it back to Washington where the answer, hopefully, can be reached as a result of his efforts.

Thank you, Mr. Chairman. [Applause.]

The CHAIRMAN. Thank you very much.

I'm going to call on our two house colleagues at the conclusion of the other testimony to sum up and send us away witha strong message.

In the meantime we've got a dozen witnesses today with about two hours, so that leaves about ten minutes per witness. And we'd like to have some time for questioning. So, if you'll hold your testimony in check to less than ten minutes that'll give us time to ask questions.

We begin with an outstanding panel of independent oil and gas drillers. Henry Goodrich is president of the Goodrich Oil & Gas Company of Shreveport, Louisiana. Frank Harrison is president of the Optimistic Oil Company of Lafayette, Louisiana. And Ronnie Sawyer is president of the Sawyer Drilling Company of Shreveport.

We'll begin with Henry Goodrich, who'll make his presentation.

STATEMENT OF HENRY GOODRICH, PRESIDENT, GOODRICH OIL CO., SHREVEPORT, LA

Mr. GOODRICH. Mr. Chairman, Senators, Congressmen. I'm happy to have this opportunity today to share with you my views on the current situation in the oil industry, as well as my idea of how we got here and where I think we're going, and one strong suggestion to make to you.

I'm not going to spend a lot of time talking about the current situation in our industry. We know it's an industry in disaster. We've seen rig counts plummet from historical highs of 4,500 rigs running a day just a few years ago to today's rig count of about 800.

The effect on drilling contractors, on pipe manufacturers, on mud and chemical companies, on electric logging companies, has been disastrous. Many of those companies are now in bankruptcy. We've seen the reason for this obviously, is we've seen the price of oil come from $36, 00 down to a low during the last year of about $8.00, currently at $18.00. We've seen natural gas from averaging $2.75 per MCF, with some decontrolled gas going as high as $10.00 per MCF, to today's spot prices of $1.20 to $1.50, when you can sell it.

Most independents were on an all-out drilling program in the early eighties. We were pledging our assets from the well we just drilled in order to get the money to drill the next one. And, unfortunately, banks were making the loans because they saw nothing in the future but higher and higher energy prices.

When prices began falling those collateral values began falling also. Each year now for the last four years the independent producers have seen the value of their assets decline, and as those collateral values decline below loan amounts, banks have foreclosed and many independents have joined the ranks of drilling contractors, and mud and chemical companies into bankruptcy.

Even those who have been fortunate enough not to go bankrupt have seen a larger and larger percentage of their reduced cash flow going to just retire their debt, or pay the interest at the bank.

How could all of this happen? From gasoline lines just a few years ago, from pipeline companies out competing and fighting to get producers reserves to today's scenario of gas price wars at the pump and pipelines refusing to take the gas from independents that they had purchased just a few years ago. How in the world did it all happen?

Some might say we have a free market in the case of oil, since all of our regulations have been removed. Some might even say we've got a free market in the case of natural gas since we are selling our gas at prices far below the maximum lawful price established by the Natural Gas Policy Act.

I would suggest, however, that we find ourselves today in the marketing of natural gas, for example, rather than in a free market, in a knee-jerk posture resulting from thirty years of federal controls of natural gas prices.

I don't know what the penalty is for preaching to the government about past mistakes, but here goes. In 1954 the Supreme Court in its interpretation of the Natural Gas Act which had been passed by the Congress held that the Federal Power Commission had not only the authority but the obligation to regulate the price of natural gas at the wellhead.

The FPC set what was known as area rate prices, which would be the maximum price that a producer could get for his gas. For example, in East Texas the price is $.14 per thousand cubic feet. In North Louisiana the price is $.18. In South Louisiana it was $.21.

These rates were designed, admirably I might add, to protect consumers from unduly high energy costs while providing in their opinion a reasonable rate of return for the producer drilling the well.

The only problem is that they were wrong, and producers didn't agree that it was a reasonable rate of return so producers began getting out of the business. We went from drilling something in the neighborhood of 58,000 wells a year in the middle fifties to a low of about 25,000 wells ten years later. The finding of natural gas and oil is almost directly proportionate to the number of wells drilled, and we were finding less and less.

In addition, the opposite side of that equation put fantastic pressure on demand for natural gas. Here was the cleanest, most efficient, easiest to transport, the finest type of energy that you could have, and it was also the cheapest. Obviously, consumers lined up in order to get natural gas. So in a ten-year period, 1962 to 1972, natural gas consumption in the U.S. rose from 13 trillion cubic feet a year to 23 trillion cubic feet a year.

Guess what happened to the U.S. reserves? From a high of 292 trillion cubic feet of gas in 1967 we declined almost every year to a low in 1979 of 194 trillion. We lost a hundred trillion cubic feet of reserves in the U.S. in just ten years. In that year, 1979, we consumed 20 trillion. So 194 divided by 20 is a 9.7 year reserve life. To put it another way, we had less than ten years of gas supply in the U.S. with no new discoveries until we were out of the gas business.

Oil reserves and production of oil were also dropping at a dramatic rate. In an eight-year period during that same time frame in the State of Louisiana we declined from 800 million barrels of crude oil produced a year to 400 million barrels of oil per year. A loss of 400 million barrels, or 50 million barrels a year. Now, it wouldn't take a mathematical genius to figure out that at that rate in another eight years Louisiana would have been out of the oil producing business.

In the case of natural gas the two curves, rapidly increasing demand and rapidly falling production crossed in the middle 70's and pipelines begin curtailing customers. We had what is now known as the famous "Energy Crisis."

The Carter Administration, in a desperate effort to solve the problem proposed, and the Congress passed, the Natural Gas Policy Act of 1978.

It may have been the most complicated, confusing piece of legislation ever passed. Some 22 different categories of natural gas pricing purposes. Such things as distance from a well, whether it was an old reservoir or a new reservoir, whether it was above 5,000 feet or below 5,000 feet, whether the sand was behind casing in an old well or was not behind casing, all of these things had a bearing on the applicable price. And prices varied for gas, the molecules of which you couldn't tell apart, from $.30 per thousand cubic feet to over $2.00, and for decontrolled gas some of it went as high as $10.00.

But what the NGPA did do was it let prices go up as long as you were looking for gas in the right category. And it let it go up in spades. The maximum lawful price under the NGPA escalated every month, and I can tell you that every gas contract that our company drew in those days provided that our price escalated every month.

So what happened? And here comes knee-jerk No. 1: Producers, having been held down all those years selling their gas for $.25 and $.30 all of a sudden had a great price to go after, and we attacked with a vengeance. It would be like holding your thumb on the end of a garden hose and then taking it off, and that's what producers did. And new producers were born every day, and in 1982 we drilled a total of 90,000 wells in the U.S.

So what happened? A lot of new gas was found and brought to market at the same time that high prices were turning away consumers. Consumption dropped from 23 trillion cubic feet to 17 trillion cubic feet due to a combination of conservation, and fuel switching, and a slowed-down economy which was slowed down in great part due to the high price of energy.

So, pipelines who had been gathering up production from producers couldn't sell their gas, and in many cases they reneged on their contracts. I can tell you that I've got a filing cabinet full of contracts with pipeline companies which are worthless short of a final unappealable court decision.

As consumption declined, the gas surplus grew, and desperate producers began selling their gas at any price they could get just to stay alive.

So here is knee-jerk No. 2: Wells are not being drilled now because the price is so low and no gas is being found. Prices have come down and the consumption has stabilized. If oil stays at $18.00 a barrel or goes higher, demand will increase for natural gas and we will see a return to an increase in natural gas consumption.

This, I believe, gentlemen, is not a free market, where you have constant price-supply adjustments in the marketplace, but wild gyrations due to 30 years of artificially low controlled prices by the U.S. Government.

Let me suggest at this point that the critical aspect of all of this, over and above the human misery of the devastated economies that we see here in Lafayette and throughout the State of Louisiana, and in Texas, and Oklahoma, and in New Mexico, over and above the human misery of all of the people who are out of jobs, families who have lost their means of income and are out searching for jobs and there are no jobs, over and above all of this the prime consideration for members of the Senate Energy Committee, for all of the Congress, and for tall Americans, is this question: Are we to be energy independent in the coming years or do we find ourselves as we did in 1973, during the Arab Oil Embargo, at the mercy of OPEC and the exporting nations?

All of this leads me to the subject of an oil import fee, with all of the problems associated with such a policy.

I will confess to you for many years I, along with many other independents, pounded the table to get the government out of our business. Therefore, when I first heard the idea of a government-imposed import fee, I was against it. I believed we should practice what we preach, and not say, "Hey, I just never had that explained to me before."

Even when companies cut back, let employees go, when my personal reserves were cut in half due to sagging oil and gas prices, I still resisted. And I can tell you, there's some people in this room today who were very unhappy with me because I would not endorse the idea of an oil import fee. But I'm here to tell you today that I've changed my mind. [Laughter and Applause.]

I'm here to tell you, to warn you, to beseech you, that we must have an oil import fee. And the reason is very simple. Our domestic production of oil is dropping like a shot. In one year of greatly reduced drilling, our domestic production has dropped by 750,000 to 1,000,000,000 barrels of oil a day. What does that mean? It means that in one year we have lost almost ten percent of our daily domestic production. And that was in a year that started out with rig counts of about 2,000. We are starting 1987 with a rig count of 800.

Even more frightening, with domestic consumption increasing, imports have increased by nearly one million barrels per day. Most of that increase coming from the politically and militarily unstable area of the Middle East.

If this continues, we will soon be a nation unable to satisfy not a frivolous lifestyle but a nation unable to supply even the basic energy needs of our people. Many billions of dollars are spent each year for defense, but I can tell you that without energy we have no defense.

What is magical about an import fee? Is it just a WPA for producers? Well, I can tell you as a small independent why it's critical to me.

My company is active throughout Louisiana and to a lesser extent in East Texas and Eastern Oklahoma. We are able in these areas to find many prospects that make sense to me at $18.00 oil, and the gas prices that would correspond to $18.00 oil. Now, many other prospects would make sense at twenty-two or twenty-five dollars. And we very much want to go about drilling these prospects and would be doing it except for one thing. We are very much aware that six months from now, just as we've completed our wells and got our money spent, that the Arabs might have a falling out, the production would be greatly increased, that prices would plummet, and we've invested our money on a well that's going to bring $8.00 instead of $18.00.

The critical, important thing about an oil import fee equal to, for example, the difference between $22.00 and $18.00 is that it would give us the stability, the knowledge of what price is going to be in order to go out and take the risk of drilling those wells today.

There would be two other very beneficial effects on the U.S. economy as a result of the oil import fee. We are now importing over four million barrels of oil a day. The latest balance of payments tell us that an annual trade imbalance, that of our annual trade imbalance $25 billion of it is due to imported oil.

Unless we escalate drilling that four million barrels a day is going to become five, and six, and seven, and I have seen predictions that by 1/1/88 with no increase in rig counts we could be importing seven million barrels of oil a day.

Secondly, an import fee would produce important treasury revenues in the effort to balance the budget. At today's level of imports, four million barrels, a $22.00 import threshold with $18.00 oil would produce over seven millions dollars per year to the U.S. Government.

Now, I know full well that a family in the Northwest or in the Midwest who are struggling to make a house payment, and a car payment, and braces on their children's teeth, and who all of a sudden have gotten a nice break in energy costs, are going to be very slow to embrace an oil import fee that's going to make their energy cost more money. Especially for something out there in the future called "energy independence."

But, I can tell you that in the name of energy independence, I submit to you that in the best interest of those very families, that that is exactly what you should do, and pass an oil import fee. And it may not be way off in the future, but just around the corner.

The CHAIRMAN. Thank you very much, Mr. Goodrich. [Applause.]

[The prepared statement of Mr. Goodrich follows:]

TESTIMONY OF HENRY GOODRICH
ENERGY COMMITTEE FIELD HEARING
FEBRUARY 9, 1987
LAFAYETTE, LOUISIANA

I am happy to have the opportunity to share with The Energy Committee my views of the current status of the Oil and Gas Industry, along with my opinion of how we got here. In addition, I would like to discuss my ideas of where we are headed and an option I believe you should consider.

There is no need to spend much time on the current condition of the industry - we all know that it is an industry in disaster. We have seen rig counts plummet from historical highs in the early 1980's of 4500 rigs running to todays low of just over 800.

The effect on drilling contractors, pipe manufacturers, mud and chemical companies, electric loggers, etc. is obvious - bankrupty of all of these service companies is catastrophic. The cause of this collapse is, of course, the fall in energy prices. Oil from $36.00 to a low of $8.00 - currently $18.00 per barrel and gas prices that averaged $2.75 (some decontrolled gas as high as $10.00) per thousand cubic feet to todays prices of $1.20-1.50.

Most independents were on an all out drilling program in the early 80's - pledging their reserves from the last well to pay for the next. Banks were eager to make these loans as they saw nothing in the future but higher and higher prices.

When prices began falling, collateral values supporting loans also fell. Each year now for approximately four years, producers have seen their asset values decline and as those collateral values fell below loan amounts, banks have foreclosed and those independents have joined the ranks of the bankrupt.

Even those who have been fortunate to avoid this ultimate situation, have never the less seen a larger and larger percentage of their reserves go toward debt retirement and less and less to new exploration.

How could this happen? From gasoline lines and even and odd day purchases at service stations, from pipelines fighting over new producers reserves we have gone to price wars at the pump and pipelines shutting in those same producer's wells. How did it happen?

Some might say we have a free market system in the case of oil as all controls have been removed. Some might also say that we have virtually a free market place for natural gas as gas is now bought and sold far below federally imposed maximum lawful prices. In other words, there is a market price.

I would suggest, however, that where we find ourselves today, in the marketing of natural gas, rather than in a free market, is in a knee-jerk posture resulting from 30 years of federal regulation.

I don't know what the penalty is for preaching to the government about past mistakes but here goes. In 1954 the Supreme Court in its interpretation of the Natural Gas Act, held that the Federal Power Commission had not only the authority but the obligation, to regulate the price of natural gas at the wellhead.

The FPC set what was called maximum area rates, for example, $.14 per MCF in East Texas, $.18 in North Louisiana, $.21 in South Louisiana, etc.

These rates were designed, admirably I might add, to protect consumers from unduly high energy costs, while providing in their opinion, a reasonable rate of return to the producer taking the risk.

The only problem was that producers didn't agree with the FPC that it was a reasonable return and they found other places to invest their dollars. From the middle 1950's when 58,000 wells were drilled in a single year, rig counts fell each year for approximately 10 years to a low of 25,000 wells. The finding of natural gas and oil is almost directly proportionate to the number of wells drilled and we were finding less and less.

In addition, the opposite side of the equation put [illegible] fantastic pressure on demand for natural gas. Here was the cleanest, most efficient, easiest to transport form of energy that was also the cheapest. Everyone wanted it. So in the 10 year period 1962 to 1972 natural gas consumption rose from 13 trillion cubic feet per year to 23 trillion cubic feet per year.

Guess what happened to United State reserves - from a high of 292 trillion Cubic Feet in 1967 we declined to a low of 194 trillion Cubic Feet in 1979. In that year we consumed 20 trillion - 194 divided by 20 equals only 9.7 years of reserve life. In other words, without new discoveries we had less than ten years of gas supply.

Oil reserves and production were also dropping at dramatic rates.

In an eight year period the state of Louisiana went from 800 barrels of oil production per year to 400 million, a loss of 50 million barrels per year. It wouldn't take a math genius to figure out that at that rate Louisiana would have been out of the oil business in another eight years.

In the case of Natural Gas the two curves (rapidly increasing demand and rapidly falling production) crossed in the middle 1970's and pipelines began curtailing customers. We had the now famous "Energy Crisis".

The Carter Administration, in a desparate effort to solve the problem, proposed, and the Congress passed, The Natural Gas Policy Act of 1978.

It may have been the most complicated, confusing piece of legislation ever passed. Some 22 different catagories of Natural Gas for pricing purposes. Such things as distance from another well, whether it was in an old reservoir or new, whether it was above 5,000 feet or below 15,000, whether the sand was behind casing in an old well or not, all had a bearing on the applicable price. Prices varied from as low as $.30 to above $2.00 and, for decontrolled gas, prices went as high as $10.00 per mcf.

But what the NGPA did do was allow higher prices for the right kind of gas, in spades. The Maximum lawful price escalated each month and all our contracts with pipelines provided for just that.

So what happened? Here comes knee-jerk No. 1 - producers, having hung on all those years at $.25 to $.30 gas, attacked with a vengence. New producers were born daily and in 1982 a total of 90,000 wells were drilled.

So what happened? A lot of new gas was found and brought to market at the same time that high prices were turning away consumers. Consumption dropped from 23 trillion to 17 trillion due to a combination of conservation, fuel switching and a slowed down economy (due, in great part to the high cost of energy).

Pipelines who had been gathering up production from producers couldn't sell their gas and in many cases reneged on their contracts. I have a filing cabinet full of contracts with pipelines that are worthless short of a final unappealable court decision.

As consumption declined, the gas surplus grew, and desperate producers began selling their gas at almost any price to stay afloat.

So here is knee-jerk No. 2 - wells are not being drilled now so gas is not being found. Prices have come down and consumption has stabilized. If oil stays at $18.00, gas consumption will increase and we are headed for another crisis.

This, I believe, is not a free market at work, with constant price - supply adjustments over the years but wild gyrations due to 30 years of artificially low controlled prices.

Let me suggest at this point that the critical aspect of all of this - over and above the human misery of the devestated economies that we see here in Lafayette and throughout the states of Louisiana, Texas, and Oklahoma, above the hundreds of thousands of families who have lost their means of income and are searching for jobs - and there are no jobs, over and above all of this the prime consideration for you members of the Senate Energy Committee, for all of the Congress and for all Americans - is this question :

> Are we to be energy independent in the coming years or do we find ourselves as we did in 1973, during the Arab Oil Embargo at the mercy of OPEC and the exporting nations?

All of this leads me to the subject of an oil import fee, with all of the problems associated with such a policy.

For many years I, along with many other Independents, pounded the table to get the government out of our business. Therefore, when I first heard of the idea of a government imposed import fee, I was against it. I believed we should practice what we had preached.

Even when companies cut back, let employees go, when my personal reserves were cut in half due to sagging oil and gas prices, I resisted.

But I am here today to tell you, to warn you, really to beseech you that "We must have an Oil Import Fee".

And the reason is very simple. Our domestic production of oil is dropping like a shot. In one year of greatly reduced drilling, our domestic production has dropped by 750,000-1,000,000 barrels per day. What does that mean? It means that in one year we have lost almost 10% of our daily production. That was in a year that started out with rig counts around 2,000. We are starting 1987 at only 800.

Even more frightening, with domestic consumption increasing, imports have increased by nearly one million barrels per day - most of that increase coming from the politcally and militarily unstable Middle East.

If this continues, we will soon be a nation unable to satisfy, not a frivolous lifestyle, but a nation unable to supply the basic energy needs of our people. Many billions of dollars are spent each year for defense but without energy we have no defense.

What is magical about an import fee? Is it just a WPA for producers? I can tell you, as a small independent, why it is critical to me.

Oil is today selling at $18.00 a barrel. During the last year it has been as low as $8.00 per barrel.

My company is active throughout Louisiana and to a lesser extent in East Texas and Eastern Oklahoma. We are able, in these areas to find many prospects that make sense at $18.00 oil (and the gas prices that would correspond). We very much want to go about drilling on these prospect and would already be doing that except for one thing - we are very much aware that six months from now, just as we have completed the wells and spent the money, that the members of OPEC might have a falling out, some would begin cheating on their quotas, production would be greatly increased and, prices could plummet. It's a risk most are unwilling to take as evidenced by a rig count of 800.

An oil import fee equal to the difference between $18.00 and $20-22.00 might cost the American people essentially zero if OPEC hangs together.

An oil import fee would stabilize the price of oil in the United States and that stability would give producers the confidence in future prices that is need if we are to risk the dollars to provide domestic oil for the future.

There would be two other very beneficial effects on the United States economy as a result of any oil import fee.

We are now importing over four million barrels of oil per day. The latest balance of payments tell us that we have an annual trade imbalance due to imported oil of 25 billion dollars per year.

Unless we escalate domestic drilling that four million barrels will quickly become five, then six, then seven million barrels per day with trade imbalances skyrocketing.

Secondly, an import fee would produce important treasury revenues in the effort to balance the budget. At todays level of imports, four million barrels, a $22.00 import threshold with $18.00 would produce over seven billion dollars per year to the United States Government.

I know full well that a family in the Northeast or Midwest faced with all of the problems of raising a family, with house notes, and automobile payments and braces for the childrens teeth, etc. - and having finally been given a break in the costs of heating their home and gasoline for the car, will be slow to embrace an Oil Import Fee plan that could raise those very costs - and in the name of Energy Independence off sometime in the Future - But, I submit to you, that in the best interests of those very families, that is exactly what you should do - and way off in the future may be just around the corner.

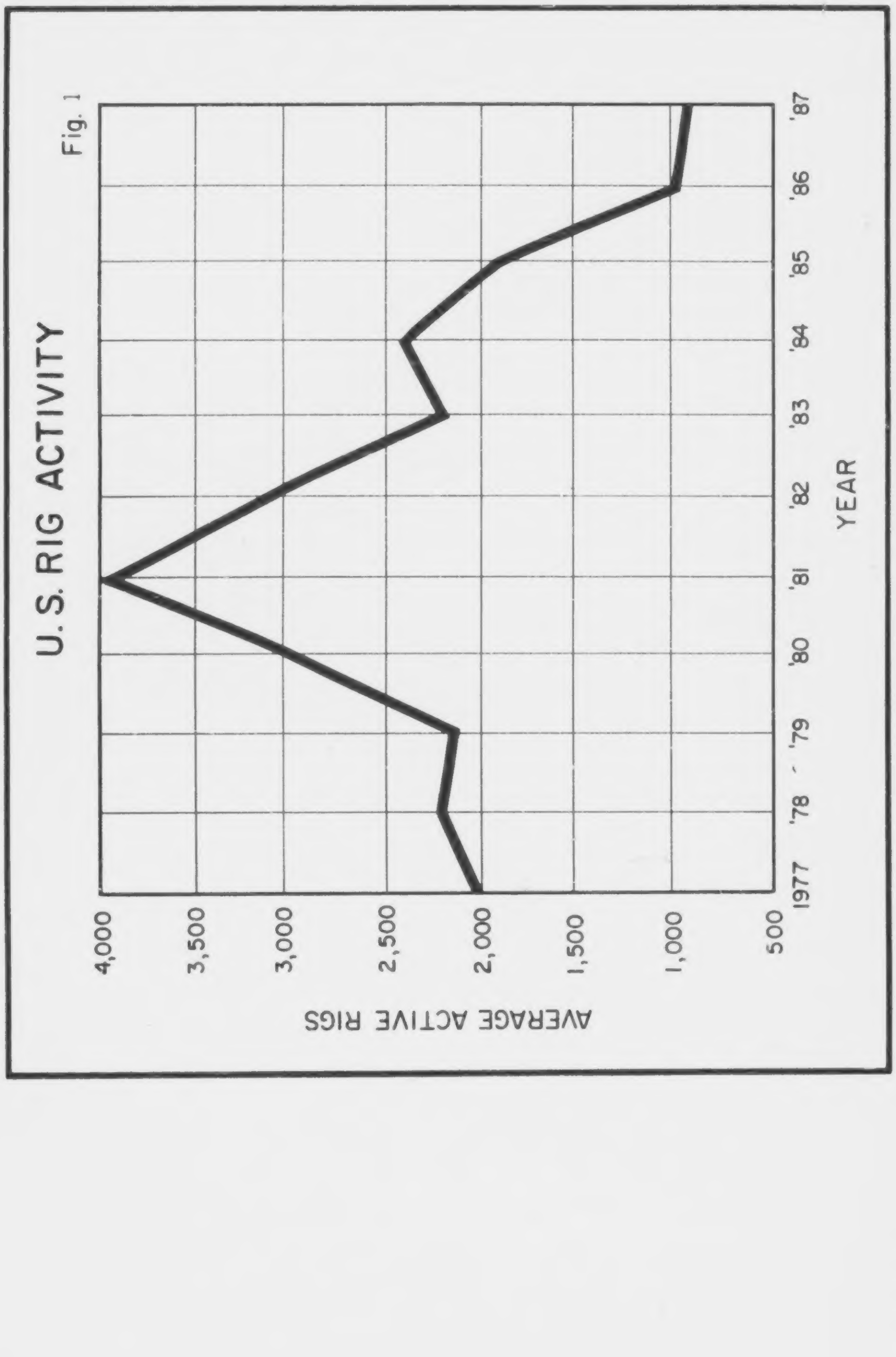


Fig. 1

U. S. RIG ACTIVITY

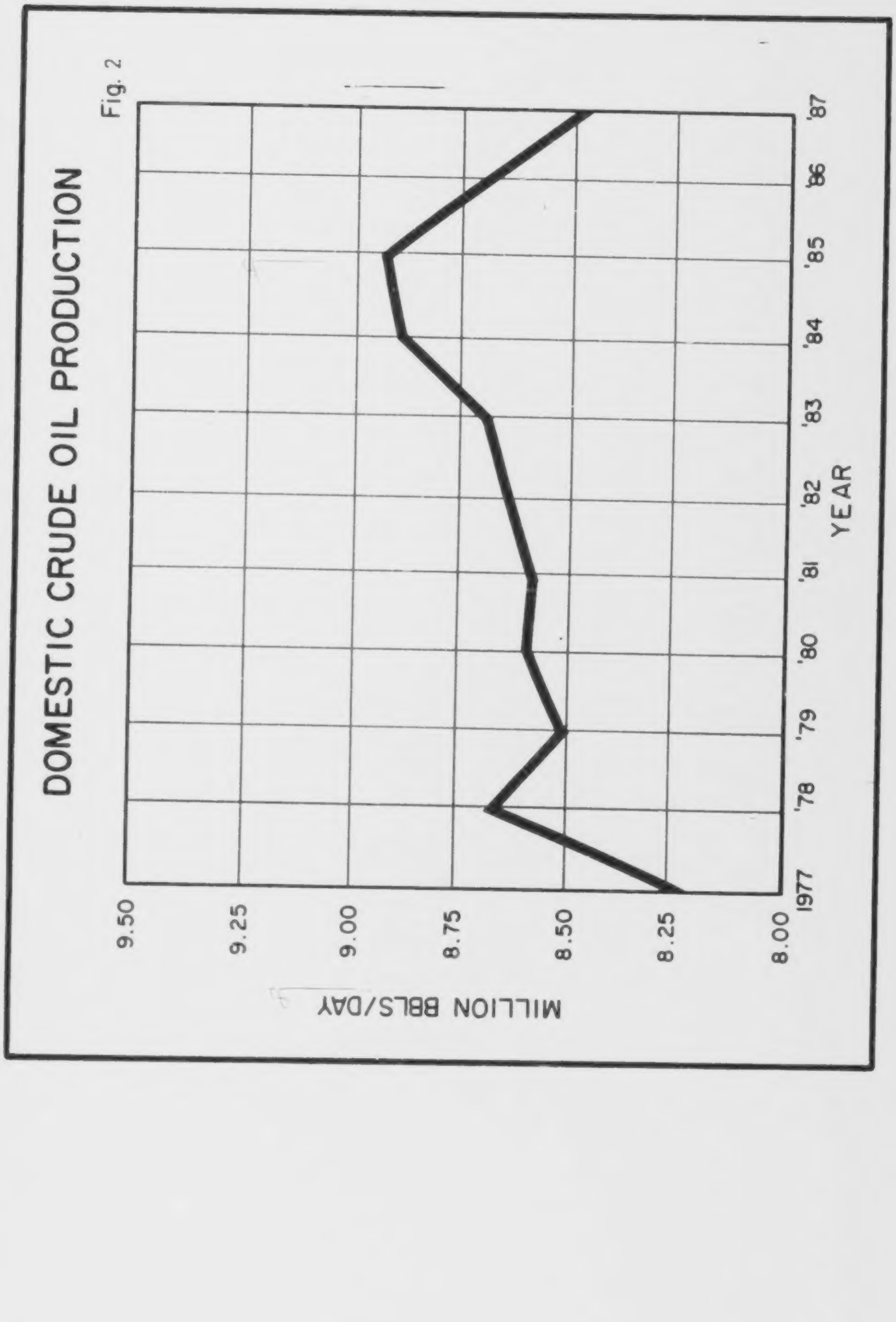


Fig. 2

DOMESTIC CRUDE OIL PRODUCTION

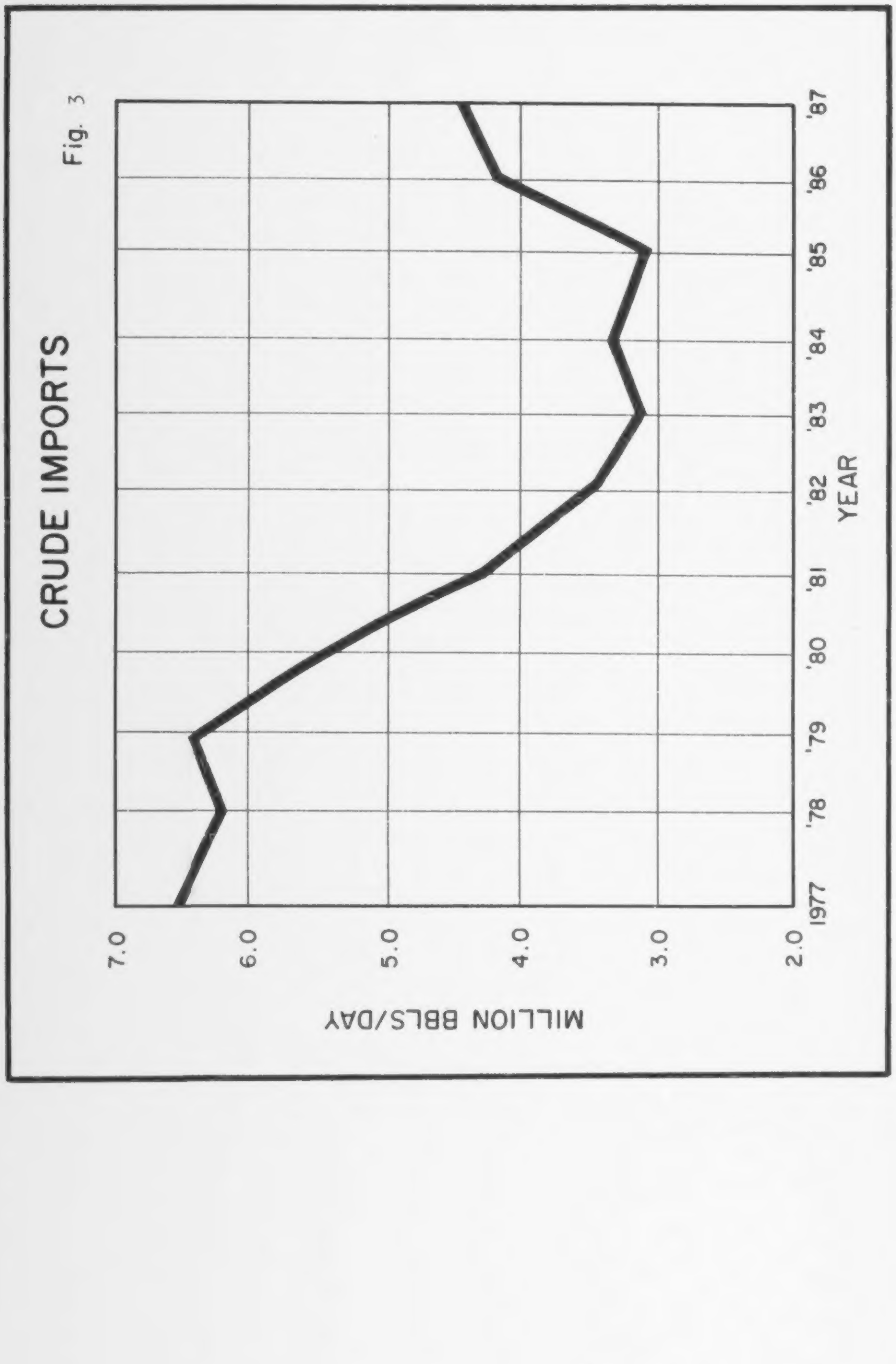


Fig. 3

CRUDE IMPORTS

TOTAL DEMAND

Fig. 4

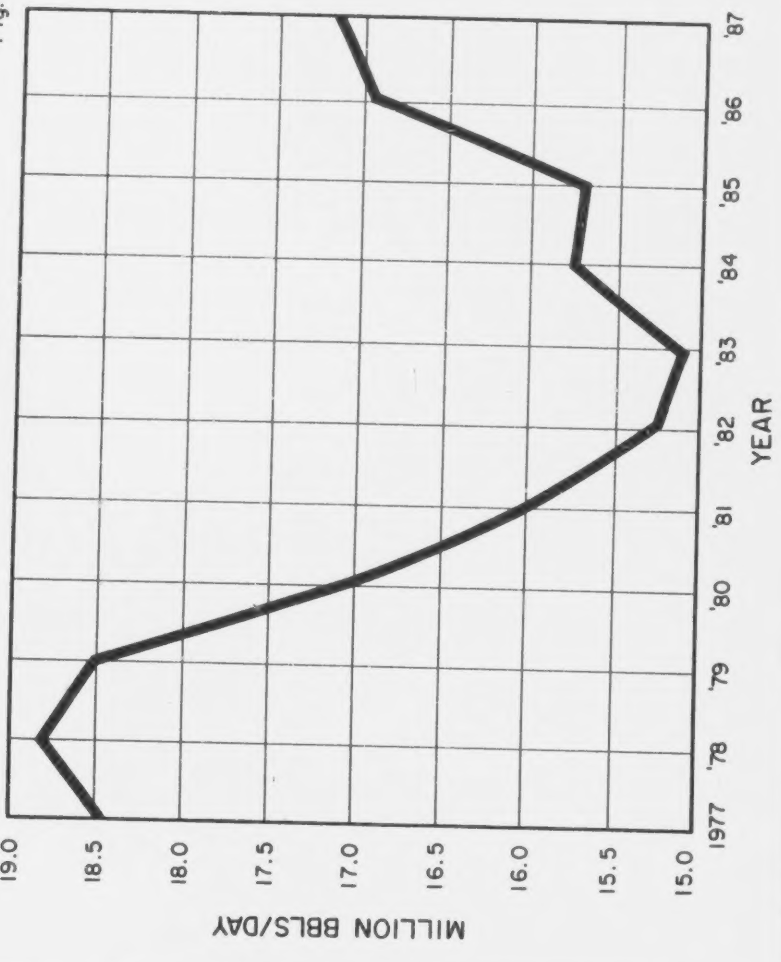
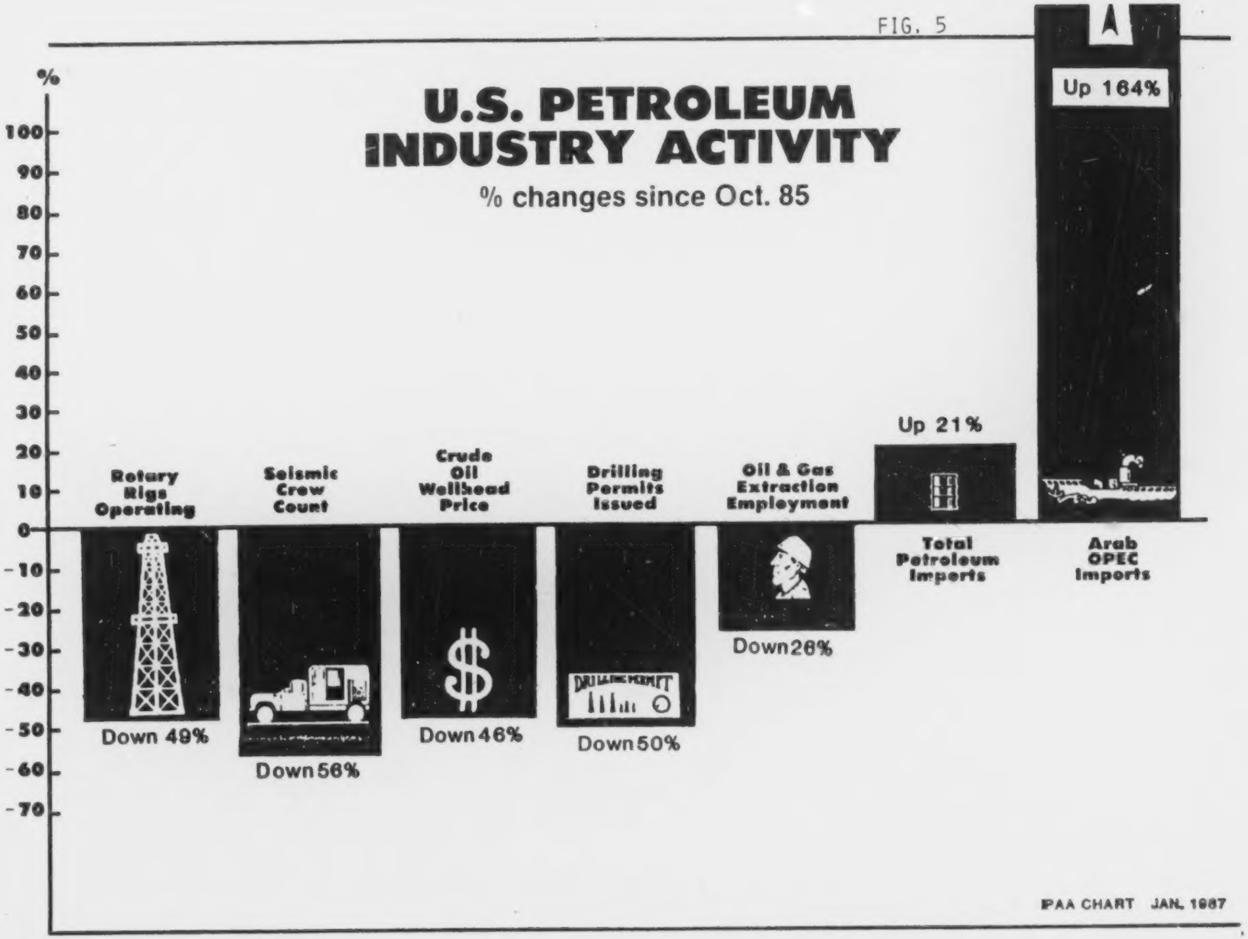


FIG. 5



IPAA CHART JAN. 1987

The CHAIRMAN. Next we want to hear from Mr. Frank Harrison, President of Optimistic Oil Company. I hope you have an optimistic message for us, Frank.

STATEMENT OF FRANK W. HARRISON, JR., INDEPENDENT OIL OPERATOR AND CONSULTING GEOLOGIST, LAFAYETTE, LA

Mr. HARRISON. Chairman Johnston, distinguished Senators, Representatives, and guests. I am Frank Harrison, an independent and consulting geologist in Lafayette. I want to welcome you to the great City of Lafayette and the center of the Gulf Coast Oil industry. I appreciate, and I know all of Lafayette appreciates, your coming to be with us today.

Now since I am an ecologist and independent, I want to focus on the state of the industry from that perspective. I feel that I'm involved, and I can give you a first-hand account of just what our status is. And if I were selecting one word to describe the condition of the independent and geologist, and the technical personnel in the industry at this time I would say it's "alarming." No doubt about it. Now, let me explain to you why it's alarming.

First of all, there is no way that the independent can stay in business through 1987 unless he receives a significant increase in the price of oil. Now you say, "Why is this?" Well, let me tell you. There are 12,000 independents in the U.S. and these independents, these 12,000, since World War II have drilled 90 percent of all the wells drilled and have found 50 percent of the oil. Now, it would be alarming and a matter of national security if these independents went out of business.

Certainly, the type of deposits they look for, which are the smaller ones, are not going to be filled in the gap by the majors.

In addition, these 12,000 independents, most of them are those that have stripper oil, and stripper oil, of course, are those wells which produce less than ten barrels per day or less. Now, again, unless there is a significant increase in the price of oil these wells are ultimately going to have to be abandoned. This is a matter of security, also. This is very alarming, because this is oil which has been found and represents about 15 percent of our proven reserve, and 12 percent of our daily production.

Now, each barrel of this that's lost will have to be replaced by foreign imports. This doesn't sound like a lot, but try this for size. 365 million barrels would be the loss in daily production over a year's time. Now, can you imagine what this would do to our trade deficit if we had to import this amount of oil?

So, once again, the independent to keep this production going has to have a significant price increase. And I want to give you a personal example. I think this will highlight just how critical this is. I have an interest in 39 stripper wells in South Louisiana. These wells average approximately seven barrels per day. Now these wells, not fifty percent, sixty percent, all of these wells lost money in 1986.

Now, we are still continuing to produce in the hopes that we'll get a price sufficient to make a profit. But a continued loss or break even through 1987, and of necessity these wells will have to be plugged and abandoned.

I think this scene is multiplied thousands of times across the country. And I'm sure you want to know "Well, will the present posted price of $17.50 be sufficient to put these wells in the black?" And the answer is an emphatic "No."

The **Chairman**. Would you tell us what "plugged" and "abandoned" means so that those who are not from the Oil Patch——

Mr. **Harrison**. That just simply means that these wells are going to be abandoned and no more production will be obtained from these wells. That's it.

The **Chairman**. Well, you put cement down the pipe, don't you?

Mr. **Harrison**. That's correct. It is a mechanical process where you actually put a plug in the well, and at that point in time it's almost impossible, irretrievable to go back and get this production.

So perhaps you want to know "Well, will $17.50 do the job?" And the answer is an emphatic "No," simply because the producer really doesn't pocket ten bucks. He really doesn't get the $17.50. After we take off severance tax, after we take off royalties, and lifting costs, we net about ten bucks a barrel. And this really is just sufficient to keep these stripper wells going.

Our lifting cost and finding cost on stripper wells are approximately $11 to $12 per barrel. So in order to preserve this vital segment of production, the independent needs about a $24 posted price, which would net him $16 to $18 per barrel.

So I hope again that you'll understand that when we say oil is at a certain price that the producer really doesn't get that mark. And this is what we need, a substantial increase in the price of crude.

Senator **Domenici**. Mr. Chairman, might I ask a question?

The **Chairman**. Yes.

Senator **Domenici**. Mr. Robertson, so that we'll have it on the record here, what's a stripper well? We all know, but you didn't tell us.

Mr. **Harrison**. A stripper well is a well that produces less than ten barrels per day. That's the historic definition of that well.

Senator **Domenici**. So that's a very small producing well, for the most part, in this country?

Mr. **Harrison**. Well, let me say this: It's very small, but there are 450,000 of those wells in the U.S. today and, as I say, they constitute 15 percent of our proven reserves. So, they are a key, really. You just can't eliminate these and not face a very substantial energy shortage in the future.

Senator **Domenici**. Oh, absolutely. I understand the total quantity, but I mean what comes out of the well, that is very small quantities; that's why we call them stripper wells.

Mr. **Harrison**. That's absolutely correct, yes, sir.

The other reason that I believe the state of the industry is alarming, and this is from the viewpoint of a geologist, I am concerned about the loss of our technical personnel. The geologist, geophysicist, petroleum engineers and landsmen are abandoning this industry in wholesale numbers. And the reason is just simply that there are no jobs around.

Let me give you an example that I think illustrates how critical this is. According to a survey made by the American Association of Petroleum Geologists in November 1986, 25 percent of all petroleum geologists in the U.S. were unemployed. Now this figure really is larger than the unemployment figures of the Great Depression. States hardest hit: Colorado 35 percent; Oklahoma 35 percent; Louisiana 25 percent. Now these are the leaders in finding oil.

And, again, this is a matter of security. If we lose these professional people, these technicians, how are we going to replace our proven reserves?

One other comment that I have, and Henry has covered some of this, but I'm alarmed as a geologist for another reason. I am concerned about the severe decline in exploratory wells drilled in the U.S. I don't know whether you've seen these figures or not, but according to petroleum information there were only 2,880 exploratory wells drilled in the U.S. last year. I want to emphasize that. 2,880 exploratory wells.

Go back to 1981, we drilled 15,000. The 2,880 happened to be 40 percent than we drilled in 1985. So without this type of well which produces the large significant reserve to replace our proven reserves as they decline there just has to be a very severe energy loss in the future.

So what does all this add up to? The plight of the independent, the loss of the revenue that we are experiencing in that particular segment, the loss of our technical personnel that we have at this time, and the decline in exploratory wells of the U.S. What's the bottom line?

The bottom line is that our industry is in a crisis, and we're sowing the seeds for an energy crunch in the future which makes the energy crunch of the 1970's pale.

I think the obvious question is: "How can we preserve this vital industry which is so important to our national security?" Or, "How can we keep independents going? How can we keep the technical personnel? How can we prevent the decline in our proven reserves?"

I've given this a lot of thought and a lot of proposals have been put forth. And they're all important. Repeal the Fuel Use Act. Eliminating the windfall profits. But really there is, in my estimation, only one short-term solution, and that's an import fee.

In my opinion, we have to have not next year, not the year after, but we have to have now an import fee which will lift the price of oil and secure the price of oil at $24 per barrel. I think this is the only short-term solution to insure the nation's energy future.

Now, again, as Henry pointed out, government regulation is against my nature, and many of you perhaps have heard me rail against all types of government regulations. But let me say this: My concern for the nation and its well-being overrides this personal philosophy.

So, I implore you, I urge you, I importune you, that Congress in conjunction with the Administration to pass an import fee of $24 a barrel.

Thank you very much. [Applause.]

[The prepared statement of Mr. Harrison follows:]

TESTIMONY OF FRANK W. HARRISON, JR.

INDEPENDENT OIL OPERATOR

AND

CONSULTING GEOLOGIST

SENATE ENERGY & NATURAL RESOURCES COMMITTEE

FEBRUARY 9, 1987

Chairman Johnson:

Distinguished Senators:

I am Frank W. Harrison, Jr., an independent oil operator and consulting geologist in Lafayette, Louisiana. I have been exploring as an independent in the Gulf Coast since 1959. It is a pleasure to welcome you to Lafayette, the Oil Center of the Gulf Coast.

Since I am an independent as well as a practicing consulting geologist, I will focus on the state of the oil and gas industry in the United States from the prospective of the independent and the geologist.

In general, the independent oil and gas operator is on the ropes and unless there is a significant increase in the present price of oil and gas in 1987, most may receive a knockout punch. No doubt the United States is at a crucial point as far as the independent's role in exploration and production in the United States.

I would like to remind you that since World War II the 12,000 independents in the U.S. have drilled 90% of the exploratory wells and found one-half of the new reserves of oil and gas in the United States. It would be disastrous to our national security which requires the replacement of our present reserves, if this effective exploration arm is lost.

In addition to playing a key role in adding new reserves, the independent has played a significant role in maintaining the production of stripper wells, high cost wells which produce less than 10 barrels of oil per day. This has significant security implications because approximately 15% of U.S. oil reserves come from 450,000 stripper wells of the nation's 650,000 producing wells. These stripper wells also contribute 12% of the U.S. daily production. This is oil that is already found and developed and each barrel of production of stripper oil abandoned means importation of an additional barrel of foreign oil.

At the present price of $17.50 per barrel, there is no way the independent can continue to produce these wells profitably, and it is just a question of time before all or many of these critical wells will be plugged and abandoned.

Let me give you a personal example. I have an interest in 39 stripper wells in South Louisiana. The average daily production from these wells is seven (7) barrels per day. All of these wells lost money in 1986. Yet we have continued to produce. However, with one more year of losing or breaking even, we will be compelled to abandon these wells. Independents are stubborn but they too must make a profit to stay in business.

I'm sure you want to know if the present price of $17.50 is sufficient to put these wells in the black. The answer is an emphatic NO. After accounting for our royalty burden of 25% and severance tax of 12.5%, the net to the producer is only $11.00 per barrel and not $17.50. This does not include operating cost which reduces the net further to about $10.00

per barrel. Lifting cost and development cost for these stripper wells are between $11 and $12 per barrel, so the possibility of a loss still exists at the current price. In order to make a profit and create some funds for exploration, the independent needs about $24.00 per barrel, which nets to the producer approximately $16.00 to $18.00 after expenses.

Therefore, if the nation's independents are to stay in business much longer, a significant increase in the price of crude is imperative. Otherwise, this important segment of the industry will be lost and the nation's security threatened.

I am not only concerned about the fate of the independent during the present price regime, but I am vitally disturbed about the technical personnel, the backbone of exploration, who are fading fast. I am referring to the geologist, geophysicist, petroleum engineers and landmen who conceive, assemble and drill the prospects that find new reserves in the United States. These experts are departing the industry in wholesale numbers. Unemployment among petroleum geologists today is higher than the jobless rate in the darkest days of the Great Depression of the 1930's according to an American Association of Petroleum Geologists survey made in November of 1986. The unemployment among geological ranks is 25%. The states hardest hit are Colorado and Oklahoma with a 35% unemployment rate, Louisiana with 26% and Texas with 24%. Let me emphasize that without the expertise of geologists to guide our exploration programs in the Unites States, a precipitous drop in proven reserves is unavoidable, and an energy crisis inevitable.

One other concern I have as a geologist is the severe, unbelievable decline in exploratory wells being drilled in the U.S. today. Exploratory wells are those which find large new reserves and keep replacing our proven reserves as they are depleted. Nationwide last year there were only a total of 2,844 exploratory wells drilled according to Petroleum Information. This amount represents a 40% drop of exploratory wells drilled as compared to 1985, and in 1981 there were over 15,000 exploratory wells drilled in the U.S. The effect of the drop in exploratory drilling on new reserves is illustrated by an American Association of Petroleum Geologists study which concluded that only one out of fifty-four wells drilled finds the equivalent of 1,000,000 barrels of oil; and it takes 1800 tries to discover the equivalent of 50 million barrels of oil. I am also attaching a number of statistical exhibits with comments prepared by John Taylor, a member of the American Association of Petroleum Geologists. These exhibits are a snapshot of our nation's energy health, and it is a disturbing portrait. It clearly reflects that reduced drilling in 1986 will result in the largest drop in proven reserves of any year in our industry's history.

What does the present plight of the independent, the exodous of technicians, and the decline in exploratory drilling mean? The evidence is conclusive; the petroleum industry is in a state of crisis and all of this points to a severe energy crisis such as was experienced in the 1970's. So then what can be done to maintain this industry which is essential to the economic and military security of this nation? How can the independents be saved so they can keep exploring and producing? How can we keep our technical experts? How can we maintain the United States daily production and replace our reserves?

The answer to all these questions is a higher price for oil. Price is the key. The industry needs an import fee, not next year, but now to increase the price of crude to $24.00 per barrel. This is the only short term solution to save the oil and gas industry and assure our national security and economic well being. I must admit that I have always been adamantly opposed to any type of governmental controls and subsidies for the Petroleum Industry. However, my concern for the nation and its future overrides my personal philosophy. Therefore, I urge Congress to immediately pass a variable import fee which would lift and maintain the price of oil at $24.00 per barrel.

Following are a series of exhibits and comments compiled by John A. Taylor to demonstrate the status of hydrocarbon exploration and production in the United States in response to the drop in price.

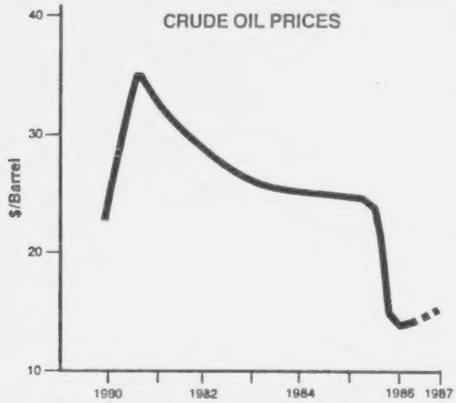


FIGURE 1

Source: Independent Petroleum Producers Association

Domestic crude oil prices have declined from $32 per barrel to $9 over the past several years, although recent cohesion within the OPEC states has brought the price back up to about $18. Annualized, 1986 prices would be about $13.20 per barrel. It may be hard to maintain the $18 price owing to the very large crude oil inventories stored worldwide. Finding costs in the United States range from $8-$11 per barrel, thus resulting in a lack of economic incentive for further oil reserve additions by exploratory drilling.

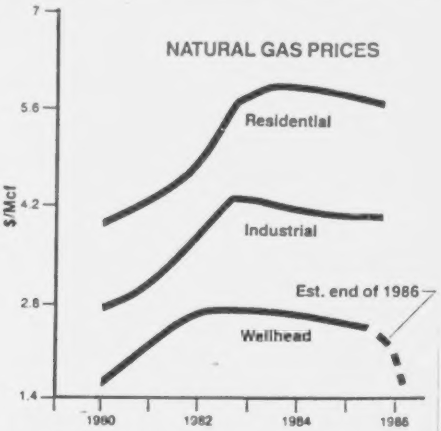


FIGURE 2

Source: Dept. of Energy

This chart, from the Department of Energy (DOE), shows the drastic cut in gas price to producers by pipeline companies over the past year, especially since March. Price is now estimated to be in the area of $1.50 per thousand cubic feet. Spot pricing was contributory to much of the drop. Annualized price in 1986 would be about $1.80 per thousand cubic feet.

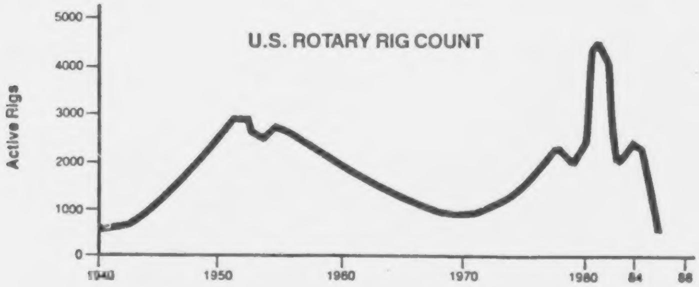


FIGURE 3

Source: Hughes Tool Co.

It is easy to see that the graphical signature of the U.S. rig count is very similar to the crude oil price trend. The rig count is now the lowest since before World War II — the lowest since rig counts have been maintained. Without rigs running, oil and gas cannot be discovered. Note the similarities of the crude oil price graph and this one.

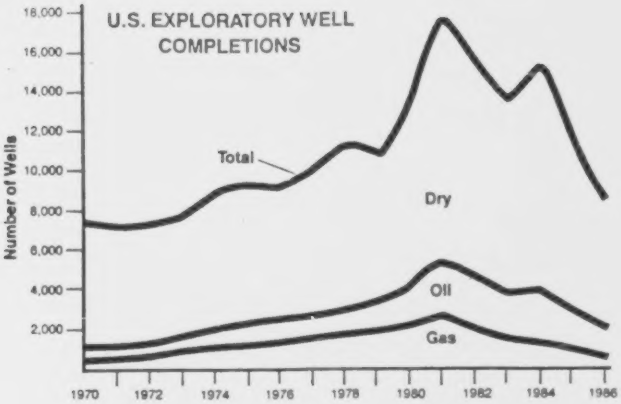


FIGURE 4

Source: American Petroleum Inst.

This demonstrates the rapid decline in the effort to find more oil and gas. The yield in new reserves per unit of effort would be even worse except for a significant increase in efficiency by industry — note the much greater decline in dry holes as compared to successful completions. The gain in gas completions as compared to that of oil in 1986 shows the shift of exploration efforts to the more favorable economics relative to gas, even though it too has suffered from price erosion.

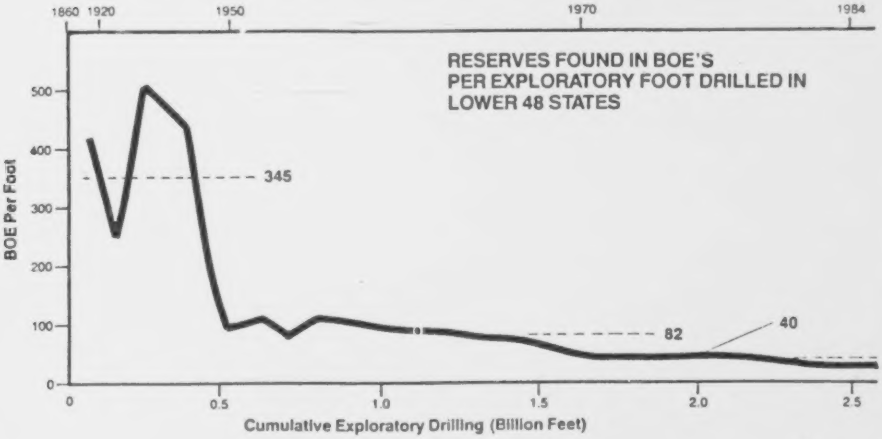


FIGURE 5

Reserves, plotted in barrels of oil equivalency (gas is valued at 6,000 cubic feet) and computed on a cumulative per-foot-drilled basis, reveals plateaus of yield. The first plateau from 1860 to the late 1940s averaged 345 BOEs per foot drilled. From 1950 to the late 1960s the yield plateaued at 82 BOEs per foot. We have been operating on a plateau of 40 BOEs per foot since that time. Even though the yield per foot has dropped, the value of the product has increased. The chart shows the abilities of geologists and improved recovery technology to provide a stable supply of reserves for prolonged price-stable periods. Industry only needs a reasonable, stable market and the encouragement to continue.

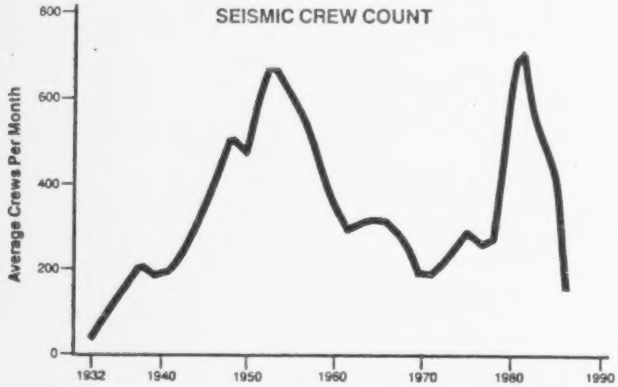


FIGURE 6

Source: Society Exploration Geophysicists

The seismic crew count is at its lowest since 1935. Records were first begun in 1932. Total land seismic crews plus marine seismic crews plummeted 55 percent, from 357 to 158 in the past year. Seismic crew activity has been one of the best indicators of future exploratory activity. This indicator demonstrates the dismantling of the U.S. petroleum industry to an extent never before seen in this century.

The situation is underscored by the results of an AAPG survey which showed an unemployment rate of 25 percent among Active members. We believe the rate to be even higher when other member categories and non-AAPG members are considered. Even the lay-offs in the early 1930s depression years did not approach these figures.

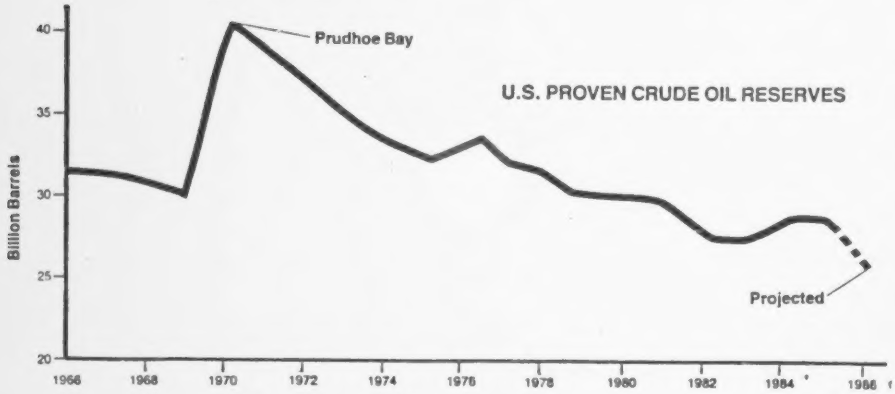
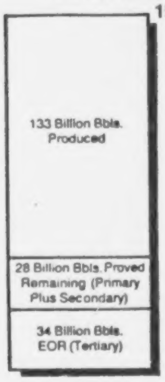


FIGURE 7

American Petroleum Institute
Energy Information Agency

From 1970 through 1978 proved crude oil reserves in the U.S. fell from 39 billion to 29.8 billion barrels. From 1979 through 1985, with increased levels of drilling, reserves dropped slightly, and in 1984 and 1985 U.S. reserves actually increased. But, 1986 figures will likely show a significant decline in oil reserves, perhaps to below 28 billion barrels. The combination of drastically reduced rig activity and write-downs in reserves due to decreased economics will cause this large drop. Thus, we become even more dependent upon foreign imports.


133 Billion Bbls. Produced
28 Billion Bbls. Proved Remaining (Primary Plus Secondary)
34 Billion Bbls. EOR (Tertiary)

ENHANCED OIL RECOVERY POTENTIAL
195 Billion Bbls. Produced or Producable

- EOR (Tertiary) potential represents 21% of total cumulative production plus proved remaining reserves.
- Over 450,000 stripper wells provide access to a significant part of this resource.
- Of 34 billion bbls., 14.5 are recoverable by technology now in place which could supply total crude needs for 4.4 years.
- Of 28 billion bbls. proved remaining, 4.5 will come from presently defined stripper wells.
- Loss of stripper wells is loss of access to major part of this resource.

Source: National Petroleum Council

FIGURE 8

Stripper wells make up 15 percent of total crude oil production and their importance as a guardian to future supply is immense. They produce 10 barrels daily or less and are especially vulnerable to low prices. Economic projections indicate that at $10 per barrel, more than 40 percent of the stripper wells will be abandoned. At $15 it is estimated that 20 percent will be abandoned. Stripper wells provide access to the very large potential of remaining oil in place that cannot be produced by primary means or even from secondary recovery procedures. About two-thirds of the original oil in place still remains after these recovery processes have been undertaken. Enhanced oil recovery (EOR) projects such as steam, carbon dioxide, and chemical injection procedures must be employed to gain additional production.

Stripper wells are a national treasure, and yet stripper wells are now being plugged by large numbers owing to the artificially low prices for crude. A national resource is being destroyed. The capital investment to re-drill much of the EOR potential may be prohibitive.

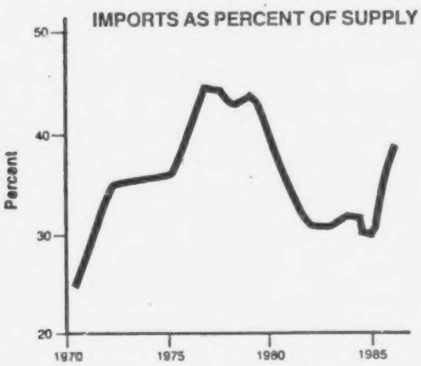

IMPORTS AS PERCENT OF SUPPLY

FIGURE 9

Industry was encouraged to increase supply in order to decrease our dependence on foreign imports, a program started in the mid-1970s. Imports had reached 46 percent in 1977, the highest ever. Industry effort brought that down to about 28 percent in 1983. But, by August 1986, it had increased to 40 percent. It is rapidly on its way to 50 percent because of the sharp drop in the drilling, the write down in reserves, and the plugging out of much U.S. capacity owing to the poor economics of low priced crude oil.

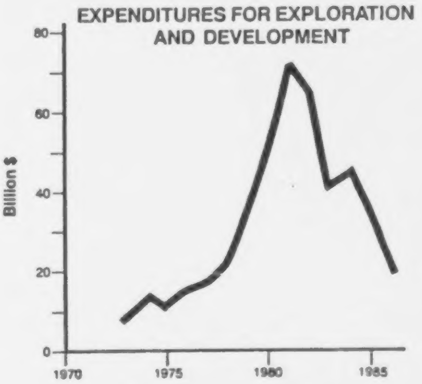

EXPENDITURES FOR EXPLORATION AND DEVELOPMENT

FIGURE 10

Source: H. F. Kepinger, Soc. Pet. Engrs.

This chart says it well. This figure indicated for 1986 is probably too high. When all the figures are in, it may be nearer to $15 billion rather than $18 billion. This is a drop from $33 billion in 1985 which in turn had dropped from a peak of $73 billion in 1981. Industry has continued to cut its expenditures leading to a continued re-trenching.

The CHAIRMAN. Thank you very much, Frank Harrison, for a very excellent statement.

Now, we'll hear from Mr. Ronnie Sawyer.

STATEMENT OF RONALD L. SAWYER, SAWYER DRILLING AND SERVICE, INC., SHREVEPORT, LA

Mr. SAWYER. Mr. Chairman, my company is a member of the International Association of Drilling Contractors, commonly known as IADC, on behalf of which I appear today. IADC is an organization of some 1300 member companies involved in offshore and onshore drilling worldwide.

Today I am also speaking on behalf of the Association of Oil Well Servicing Contractors, the International Association of Geophysical Contractors, the National Ocean Industries Association, and the Petroleum Equipment Suppliers Association. Together we represent some 250,000 employees and 2,200 firms, ranging from the Fortune 500 companies to the small individual entrepreneurs, throughout the country.

Now let me say at the outset that all of our group are directly linked to the producers. And it should go without saying that some of our objectives are identical to them. I will try not to repeat too much of what has been said by the other speakers. But I think it is important to know that whatever affects them affects us in like manner.

While some casual observers may think the general condition of the oilfield service and supply industry is improving, speaking as a trooper in the front lines in the fight for the industry survival, I can assure the members of this committee that conditions are not improving, and that we are experiencing only what might be a small brief respite in the ongoing disintegration of the U.S. oilfield service industry.

The wide swings in the price of crude oil which the industry has recently experienced constitute a majorthreat to the survival of the domestic U.S. oilfield service industry. The price of West Texas Intermediate on the U.S. spot market dropped from a high of $36.00 in 1981 to $25.20 in December, 1985. It then plunged to a low of $10.40 on March 9 of 1986. The price last week was $18.72.

Drilling activity cannot be expected to increase unless there is some reasonable expectation of what the return on investment will be. Under present conditions planning is difficult, if not impossible. Until some stability is achieved in the price of oil, the long-term prospects for the oilfield service industry will remain a question.

Now our industry has been in a recession since 1981, but it was not until 12 months ago that we recognized it was a two-stage recession; the second stage being a depression for most of us. The period from 1981 to 1985 was one of significant contraction for the industry. The rig count dropped from a peak of 4,530 to 1,950, a 57 percent reduction in four and a half years. Our member companies were adjusting with difficulty to the harsh new market when the first six months of 1986 saw an unprecedented further collapse with the rig count falling to 663 on July 14th. This is the lowest number since they have been keeping records of rigs operating.

Other industry indicators which reveal the depth of our problem are:

The number of well service rigs. That is, rigs used to maintain producing wells. They have dropped from 5,280 in 1981 to 2,500 in 1986.

The seismic and geophysical crews, land and marine, doing preliminary exploration in the U.S. fell from 744 in September 1981 to 157 in December of 1986. The latter figure has not been experienced since 1934.

In March 1982 the total oilfield employment and manufacturing and services reached 619,000. In December of 1985 it was only 377,400. In November of 1986 it had fallen to 247,500.

Now numbers alone only tell part of the story. A substantial part of the work force consists of highly trained professionals. The professionals who have been laid off have in many cases left the industry. And experience shows that they are unlikely to come back when the market does eventually turn around. Trained professionals will be needed to replace those that have been lost. If we have to start at the college graduate level, it is estimated that it could take over three years to train a graduate engineer to operate in the field at 90 percent efficiency.

To young people seeking a career the message is perfectly clear: Do not look in the Oil Patch. The situation at Texas A & M Department of Petroleum Engineering is representative of the problem that is developing. In 1982 the student body of the department was 1,700. In 1986 the student body was 450. And of that 450 there was an inordinate amount in the senior divisions. In other words, next year it'll be even less than that. I'm sure that USL could probably give us statistics that would parallel that.

But aside from the highly trained college graduate, let me digress just a moment to some personal experience. In the drilling industry out in the field where the activity really takes place this is primarily done by people who are trained on the job. These people were in short supply coming out of the sixties when the industry began a very slow growth. And even during the late sixties and early seventies personnel was a major problem to staff the oil industry, particularly the drilling rigs.

All during the seventies we underwent a period of time when a great deal of training, a great deal of recruitment, and a great deal of rebuilding of the personnel pool to man the drilling rigs was accomplished. This was not easy. It was very difficult. It was much more difficult than trying to manufacture equipment, which can be done given an adequate time to do it in. But to lure the people back incentives have to be there. These were slowly developed and were actually maturing about the time the industry crested.

Many of these people in our own operation had undergone ten and fifteen years of training in primarily an upward mobile industry. But in 1981, and truly in 1982, reality was soon facing them. Many of the people were laid off. Many of the people lost their jobs. Some stuck for a good while to see if it improved, thinking maybe it was a short-time problem. It proved not to be a short-time problem. It was much longer in duration.

Our experience has been in recent months when we, well, within the calendar year 1986 when we had to lay off some of these most highly trained people, when we went back to encourage them to come back when we did have a contract to drill the response was quite interesting. It was not one of lack of interest in the industry. In fact, they said they dearly loved the industry; they wanted to make their career there. But in realizing that their jobs were directly affected by a people from without this country, and that policies could cause elimination of their jobs, they were not anxious to return until they could see some stability. That stability was not in view. They were offered the opportunity to return, and turned it down because they were in their mid-career life and felt they had to look after their own family, their own obligations. They had house notes to serve, car notes to serve, all the things that all of us live with. And they did not see it in this industry.

They are not going to be there until there is some stability. And I think that's what we're all searching for.

The skeptics who believe we are crying wolf point out that our industries have responded to price signals in the past. This is true, but in the past it's been more transitional; these prices have drifted over a number of years. That was not the recent experience. Mr. Chairman, our industries experienced a price collapse of such magnitude in the first six months of 1986 that it was devastating. Scores of the oilfield service companies and contractors are simply gone. They are not there. Those that remain have had to drastically reduce capacity and employment in order to survive.

I think every company has done everything possible to make their operation as efficient as they can. I'll cite our own experience. We are currently operating today a fleet that amounts to 27 percent of our fleet that we were operating in 1981–82. We are operating that fleet with 17 percent of the personnel. That's a drastic cut. It is a maximizing of efficiency, and we are doing the best job we can. But it's continuing to be a deteriorating situation.

My point is that if the industry should turn around, if we do regain some price stability,—it's going to be important that stability is there, probably even more so than what level of price is established—because we cannot man the industry, we cannot lure the people back because we don't have the incentives. When those incentives are in place and there is a future, we'll be able to adequately staff and man the equipment that is necessary to drill the wells that people like Mr. Goodrich and Mr. Harrison will be hopefully putting on the boards.

I think that to realize what has happened to the drilling contractor in particular, and anyone in the equipment operating business, the story is not told any better than it is at the auction block. The rigs today are selling in the range of three to five cents on the dollar. That's dramatic. Actually, we've had some reported less than that. You can see what has happened to the contractor's asset, or the equipment operator's asset.

Mr. CHAIRMAN. Well, they're not manufacturing any new rigs, drill bits, or that sort of thing, are they?

Mr. SAWYER. No. With the level of operation there is such a surplus that there is virtually no manufacturing at all.

One of the pitfalls of that is, of course, that as this equipment is used up over whatever period of time is necessary to use it up there will come a time when manufacturing is necessary. Manufacturing costs will not be the same as using dormant surplus. It'll be much more expensive. As a result, we are dealing today with some fictitious and really non-realistic expenses, because they are not being realized.

I think that the impact of the oilfield companies is probably told in the aggregate, as well by the figures that the Value Line Investment Survey yielded. This is a composite earnings for a group of 26 oilfield companies, and it showed earnings of $4 billion in 1981. By 1985 the profits had fallen to $285 million, not billion. And 1986 the same companies are estimated to have lost $1.1 billion.

Mr. CHAIRMAN. I'm sorry. If I may, let me interrupt you at this point, because we want to have time for questions, and we have these distinguished members of the panel who want to speak. The Governor is on the way in and we want to save some time for him.

Let me ask you this, Mr. Sawyer: Later in your statement you point out that we need to repeal the Fuel Use Act, increase the strategic petroleum reserve, drill off California and Alaska and repeal the Windfall Profits Tax. We are also considering, or some of us are considering, an increase in the depletion allowance.

Now those of us on this panel support of all things. But what is the relative importance of those things compared to an oil import fee?

Mr. SAWYER. Those things were included to make the suggestion comprehensive. I think that they pale in comparison to importance of the oil import fee.

I think there is nothing that will do more than the oil import fee to reestablish a healthy industry, a viable industry, and, therefore, the capability of this country somewhat protecting its reserves.

I will jump to the end, and I will not take any further time to elaborate on those issue that you have just recited.

We did want to go on record, representing the various associations that I mentioned previously, that we do support those actions, as well as the oil import fee.

I would like to also qualify that there is one of the associations who has not yet gone on record in support of the oil import fee of which I represent today, and that is the National Ocean Industries Association. They have not taken a position yet. They are looking at it now, and it's anticipated that they will take a position on it.

[The prepared statement of Mr. Sawyer follows:]

**INTERNATIONAL
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STATEMENT OF

Ronald L. Sawyer

Sawyer Drilling and Service, Inc.

Shreveport, Louisiana

ON BEHALF OF

The International Association of Drilling Contractors
The Association of Oilwell Servicing Contractors
The International Association of Geophysical Contractors
The National Ocean Industries Association
The Petroleum Equipment Suppliers Association

Before the

Committee On Energy and Natural Resources

United States Senate
February 9, 1987
Lafayette, Louisiana

PRESIDENT NED E. SIMES
FIRST VICE PRESIDENT GEORGE McKOWN

EXECUTIVE VICE PRESIDENT
ED McGHEE

SECRETARY-TREASURER
JAMES M. NICKLOS

Regional Vice-Presidents

INTERNATIONAL: John R. Huff
TEXAS GULF COAST: Burt Harkins
MID-CONTINENT: George S. Dotson
SOUTHEAST COAST: Dean Shank

OFFSHORE: Gary Kott
ROCKY MOUNTAIN: David L. True

PACIFIC COAST: J. E. Suttle
WEST TEXAS-EAST NEW MEXICO: Ray Brazzel
NORTHEAST TEXAS-NORTH LOUISIANA-
SOUTH ARKANSAS: C. A. Hinton

STATEMENT OF OILFIELD SERVICE AND SUPPLY ASSOCIATIONS

Mr. Chairman, my name is Ronald L. Sawyer. I am President of Sawyer Drilling and Service located in Shreveport, Louisiana. My company is a member of the International Association of Drilling Contractors (IADC), on behalf of which I appear today. IADC is an organization of some 1300 member companies involved in onshore and offshore drilling worldwide.

Today, I am also speaking on behalf of the Association of Oilwell Servicing Contractors (AOSC), the International Association of Geophysical Contractors (IAGC), the National Ocean Industries Association (NOIA), and the Petroleum Equipment Suppliers Association (PESA). Attached to my statement is a description of each of our associations. Together, we represent some 250,000 employees and 2,200 firms, ranging from the Fortune 500 companies to small individual entrepreneurs, throughout the country.

While some casual observers may think that the general condition of the oilfield service and supply industry is improving, speaking as a front-line trooper in the fight for industry survival, I can assure the members of this committee that conditions are _not_ improving and that we are experiencing only a brief respite in the ongoing disintegration of the U.S. oilfield service industry.

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Other industry indicators which reveal the depth of our problem include:

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- In March, 1982, total oilfield employment in manufacturing and services reached 619,000. In December, 1985, it was 377,400. In November, 1986, it had reached 247,500. (Source: U.S. Bureau of Labor Statistics.)

Numbers alone tell only part of the story. A substantial portion of the workforce consists of highly trained professionals. The professionals who have been laid off, have, in many cases, left the industry. Experience has rhown that they are unlikely to come back, when the market does eventually turn around. Trained professionals will be needed to replace those we have lost. If we have to start at the college graduate level, it is estimated that it could take over three years to train a graduate engineer to operate in the field at 90% efficiency.

To young people seeking a career the message is clear: Do not look in the Oil Patch. The situation at Texas A & M Department of Petroleum Engineering is representative of the protlem that is developing. In 1982, the student body of the department was 1,700. In 1986, the student body was 450. Of this number, a disproportionately large group were seniors.

Skeptics who believe that we are crying wolf point out that our industries have always responded to price signals in times past. This is true, but in the past, prices drifted higher or lower over a period of several years. Never, Mr. Chairman, have our industries experienced a price collapse of such magnitude as in the first six months of 1986. Scores of oilfield service companies are simply gone. Those that remain have had to drastically reduce capacity and employment in order to survive.

The contract drilling industry is being devastated. More than 40 percent of the firms engaged in oil and gas drilling just a few years ago are out of business. Many of those that remain are on the brink of bankruptcy. Our plight is shown most dramatically by the domestic rig count. Worse still, we are not simply talking about equipment that has been placed on the shelf to await better days. Drilling rigs are outdoor equipment; they degrade over time. In addition, many strapped drilling contractors have been forced to cannibalize their equipment to keep other rigs running.

The pressure on oilfield service companies has been unrelenting. According to the Value Line Investment Survey, composite earnings for a group of 26 oilfield companies was over $4 billion in 1981. In 1985, net profits fell to $285 million, and in 1986, the same companies are estimated to have lost $1.1 billion.

To give some measure of the breadth of the energy industry depression, PESA asked the firm of Simmons & Company International to break out earnings data by sector. The data show clearly that even established firms are experiencing severe losses in every sector of the industry, save production-related service companies who serve existing wells and other downstream activities.

These firms already have $11 billion in accumulated debt. It is difficult to see how these firms can service such a large burden in light of substantially reduced or negative cash flows.

In sum, Mr. Chairman, the oilfield service infrastructure has been radically altered, and our ability to respond to an increase in domestic drilling is limited. Should the price of oil rise sharply, it may be impossible to respond to a major increase in activity in a timely and effective manner. Our response to changing price signals will not be the same because the industry itself is not the same.

The decline in oilfield activity also holds important implications for the country's crude production and the outlook for its future supply capability. In December 1986, domestic output fell 700,000 barrels per day (an 8% reduction) from the prior year. Crude oil imports, on the other hand, have increased dramatically, particularly from Arab members of OPEC.

These events reverse an eight-year trend of declining dependence on foreign oil supplies. In 1986, the U.S. imported about 37% of its total oil needs, compared with 32% in 1985. Oil industry observers suggest that the U.S. could be importing half of its oil requirements by as early as 1990 if prices remain below $20 per barrel, and the country's dependence on imports could reach or exceed the peak level of dependence that existed in the 1970's.

This imbalance in U. S. oil markets has several implications for the U.S. as a whole. Higher import volumes further deteriorate the nation's balance-of-payment position and heighten the costs of any disruption to the flow of internationally-traded oil. Import dependence may also have indirect costs to the nation's political security, including a loss of flexibility in U.S. foreign policy initiatives, a strenthening of the position of oil-exporting nations not allied with the U.S., and an increased likelihood of U.S. involvement in armed conflict to preserve access to crude supplies. While these costs are not readily quantified, they could well be the most important costs imposed by increased U.S. dependence on imported oil.

POTENTIAL SOLUTIONS

There are a number of policy initiatives that are now before you introduced to address these issues and help to shape the energy environment in which the U.S. will participate. Because the problems are complex, we recognize that the solutions must also be multifaceted, addressing both incentives to encourage the long-term development of domestic reserves and to affect growth in the country's oil demand.

Those proposals are as follows:

Impose an Import Fee or Tariff on Oil and Petroleum Products

Mr. Chairman, we congratulate you on your strong support for an import fee on imported crude oil and petroleum products. Without such a fee, imports will continue to rise with the net result that both proven reserves and domestic production capacity will continue to drop. This could place in severe jeopardy our ability to respond adequately to either a national defense emergency, which would increase demand, or to a disruption of foreign imports for whatever reason. With no contingency in sight, except the limited supplies stored in the SPR, this should be a major national security concern. When prices begin to escalate in earnest, the impact on the balance of payments and the economy at large would indeed be severe. We believe that an import fee could be keyed to a specific oil price, such as you suggest, and phased out as prices rise above this target "floor". In addition, the enabling legislation or directive should be without exceptions and have a sunset provision ending any import fee tariff on a specific date.

We do not call for an oil import fee lightly, but it is clear the OPEC cartel is engaged in predatory pricing to ~~force com~~petitors out of the market. Indonesian oil minister Subroto recently stated that the most recent pricing policies of OPEC are designed precisely to maximize profits for OPEC members, and at the same time not stimulate U.S. drilling activity.

Mr. Chairman, all of the associations I speak for, with the exception of the National Ocean Industries Association, support an import fee. NOIA has taken no position but is actively considering such a move.

Tax Incentives to Improve Cash Flow and Attract Investment

Under present market conditions, there is great pressure on our customers' cash flow. This pressure has been increased by current tax law. Repeal of the 50% of net income limitation for the depletion deduction and increasing the rate of the depletion deduction as provided in S.233 would ease this pressure and help encourage drilling. Expensing of geological and geophysical costs and repealing the IDC recapture rule, also included in S.233, would also be important help.

In 1985, an estimated 452,000 stripper wells provided about 15% of the nation's domestic oil output, representing an important source of new production during the early 1980's.

While a current inventory of stripper wells is not available, it is estimated that a large number of these wells have been shut-in in the past year, contributing significantly to the loss in U.S. production. We believe that this incremental source should be protected to ensure its future availability, including an increase in percentage depletion rates to increase cash flow to eligible producers and the extension of depletion allowances to integrated producers with stripper or tertiary production.

Repeal of the Windfall Profits Tax (WPT)

We agree with you, Mr. Chairman, that the time has come to repeal WPT. WPT does not currently generate any federal revenue, but does create an expensive administrative burden on both industry and government. The main problem we have is that it acts as a disincentive to investment since it would diminish profits when prices begin to rise again. The associations I represent strongly endorse S.255, which was introduced to accomplish this objective.

Incentives for Hostile Area Exploration

Legislation has been proposed to establish a tax credit of up to 15% for exploration conducted north of the 49th parallel and in offshore waters deeper than 600 feet. For new production, the proposal calls for a credit of $5 per barrel of oil equivalent. The amounts of both credits will be reduced for the intermediate water depths between 1,200 and 600 feet and for oil prices between $22 and $30 per barrel, adjusted for inflation.

Repeal of the Fuel Use Act and Incremental Pricing

Efforts to achieve either or both of these objectives have been thwarted because of opposition from the coal industry and reluctance to consider them independently of other issues such as transportation and take-or-pay. We believe that a good-faith effort on all sides can achieve results. There is unanimous support among our five associations for this measure.

Improve Access to Federal Public Lands

Two of the most promising sites for domestic oil and gas exploration and development lie on federal public land. One is the Coastal Plain of the Arctic National Wildlife Refuge (ANWR) in Northern Alaska, the other is Offshore California. Both these areas have the potential for adding major new domestic oil reserves to the U.S. inventory. Operating experience has shown that industry can act responsibly to serve the nation's energy requirements and maintain the ecological integrity of the area.

The measure is also fully supported by our five associations.

CONCLUSION

The 99th Congress considered a number of proposals to deregulate and otherwise assist the energy industry. Many, like repeal of the Windfall Profits Tax, are needed, but none would have had the immediate effect of an oil import fee. I believe an oil import fee would protect the crumbling drilling industry, stimulate renewed domestic exploration and production, and reverse the dangerous trend toward increasing reliance on unreliable foreign suppliers. It would also provide significant new revenues to apply against the budget deficit and help ease our international trade imbalance, which is largely attributable to energy imports. The oil import fee is the best hope to provide for the future of U.S. domestic oil supplies. I urge you to work for enactment of an oil import fee for the good of Louisiana and the nation. The question is: Will our domestic industries that emerge from the 1980's be prepared to help meet the country's economic and security challenges of the 1990's? Your committee, by adopting our suggestions, could go a long way toward assuring that they are.

This concludes my statement, Mr. Chairman. We appreciate the opportunity to present our views today. I will be happy to answer any questions that the Committee may have.

PETROLEUM EQUIPMENT SUPPLIERS ASSOCIATION

Founded in 1933, PESA is comprised of 210 member companies in the oilfield equipment, service, and supply industries ranging from "Fortune 500" enterprises to individual entrepreneurs. PESA member companies operate in 46 states and 75 countries with combined 1986 sales estimated at $10 billion.

NATIONAL OCEAN INDUSTRIES ASSOCIATION

The National Ocean Industries Association (NOIA) is a trade association founded in 1972 and is comprised of over 350 member companies. This figure is down from over 430 members, just one year ago. NOIA represents a wide array of interests involved in all aspects of exploration and development of the nation's offshore petroleum resources. The membership includes, among others, drilling contractors, equipment manufacturers and suppliers, geophysical contractors, oil and gas producers, air and marine transportation firms, engineering and construction companies, service comanies and steel companies. Member companies are headquartered in 34 states and have operations in all 50 states.

INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS

Founded in 1941, IADC currently has 1,366 member companies, including oil and gas well drilling contractors, service/supply/manufacturing firms, and producing oil and gas companies.

Membership is virtually world-wide and includes more than 90% of the world's contract-drilling rigs. IADC has consultative status with the UN's International Maritime Organization, London.

ASSOCIATION OF OILWELL SERVICING CONTRACTORS

The Association of Oilwell Servicing Contractors is the service organization to the oil industry. It's job is to service and maintain production from the nation's source of 850,000 oil and gas wells. The AOSC is composed of some 700 member companies across the U.S. which represent about 4,000 well service rigs and associated suppliers and manufacturers to the industry.

INTERNATIONAL ASSOCIATION OF GEOPHYSICAL CONTRACTORS

Founded in 1971, IAGC is the trade association which represents the independent service companies and geophysical departments of integrated oil companies which do virtually all of the geophysical data acquisition, processing and interpretation -- primarily utilizing the seismic method -- in search of new crude oil and natural gas supplies in the free world. Geophysical data processing centers, data brokerage and exchange companies, geophysical consulting firms, and geophysical equipment manufacturers and suppliers also are members of the association.

The CHAIRMAN. Mr. Harrison and Mr. Sawyer, Henry Goodrich said we needed a price of $24 a barrel. Do you advocate that same precise price, or in your opinion, what price would it take to preserve a domestic oil industry?

Mr. HARRISON. Yes. Frank Harrison speaking here.

Actually, I believe I advocated the $24 in my statement, and I think that's a minimum price. But, if you want the independents to stay in business exploring, I think it's vital that they do, they've got to have at least this to make some profit that they can continue to drill some exploratory wells. That, to me, is really bottom line. And that's about the bottom price that'll get this industry rolling again.

The CHAIRMAN. Henry Goodrich, what do you say?

Mr. GOODRICH. Well, I had said $22. But I need to clarify that, looking at my personal operation I can see a lot of things we can be doing at $22.

The CHAIRMAN. You'd better get the mike up to you there.

Mr. GOODRICH. Excuse me.

However, as Frank pointed out, the stripper producers can't get by on $22. Probably $24 would be very marginal for strippers.

The CHAIRMAN. Would it be fair to say that you can begin to explore to your best prospects at $22, and as the price goes up you put a higher and higher percentage of those prospects into your possible list?

Mr. GOODRICH. Senator Johnston, on every prospect you have very—I mean you are dealing with a guesstimate to begin with. We understand that.

But you do the best you can in figuring out how much reserve you would have if your well was successful, and you'd take the cost of that well and it's just simply a question of what the return on the investment putting a risk factor in it looks like. And at $25 the prospects that you would eliminate at $22 become do-able. And at $30 they're a lot more.

And one of the reasons we were drilling so many wells in the early eighties is that we were getting a good price for our gas. We were getting $36 for oil. And there are an awful lot of prospects that can be drilled when you're talking about those kind of prices that you can't drill at $22.

The CHAIRMAN. Mr. Sawyer, what is your view?

Mr. SAWYER. We don't attempt to quantify it as a figure, because as I said before we are directly linked to these gentlemen and other producers, and at the level that they are satisfied that they will be active in the business that, of course, will generate the work that we look for.

I think, though, as a general opinion the range that they have mentioned is probably what we would feel would be adequate to support activity.

The CHAIRMAN. I'd like to ask all three of you a question, and I'd like a very brief answer.

Let's say we proceed on present policy and have a price of oil that gyrates between say $18 or $19 a barrel on the top side, and maybe as low as $13, 14 or $15 on the bottom side, and that policy continues for a couple of years.

Then let's say two years from now the Ayatollah gets in control and he says, "We're not going to have $20 oil. We're going to have $100 oil."

And they turn to the Henry Goodrich's, Frank Harrison's, and Ronnie Sawyer's in this world and say, "All right, gentlemen, do your magic. Produce as you did before."

Can you produce at that time, let's say two or three years from now, or can you not? And if not, why not?

Mr. GOODRICH. Well, I plan to still be in business then. I hope I am. But Frank Harrison has touched on the problem very clearly. And that is that the technical people in our industry are disappearing. By the mere fact that there is no job for them in this industry, are going somewhere else. And you can't train people overnight.

So, there's just no way that short term we could gear up and do what we were doing in the 80's. It would take a number of years, in my opinion.

Let me say one more thing. We are in this so-called era of oil glut. What we need to keep in our mind is even in this day of surplus and low prices the U.S. is importing four million barrels of oil every day. If we did not have that four million barrels of oil we would have a huge shortfall in the energy that we need just to meet our basic needs.

Mr. HARRISON. Well, Senator, I'll just say that the answer to your question, "Can we gear up in a couple of years and begin to find and develop oil immediately?" the answer is "No." I concur with Henry.

I do want to point out, and I have some graphic illustrations on my testimony that I think are very important. It's a snapshot of a healthy industry. And it's a disastrous portrait. The bottom line being that by projection we're going to have the largest loss in proven reserves of any year in the history of our industry. That's going to be what happens this year.

So not only will you be facing the problem of gearing up to look for oil and gas in two years, you're going to have this tremendous shortage that's going to occur, because we're not drilling wells right now.

The CHAIRMAN. What you're saying is that once Humpty-Dumpty falls from that wall it's going to be very difficult to put him back together again, unless we do it now.

Mr. HARRISON. It has to be done now to save this industry. [Applause.]

The CHAIRMAN. With that hand, I guess you would agree as well, Mr. Sawyer?

Mr. SAWYER. Very definitely. I think it may be academic to ask me what would be happening two years down the road on a continuation of this policy. I don't think that many of us will still be here, because I think that it is—you need to realize that if that does happen that the disappearance of so many of the supply, service, and manufacturing people from the scene will create a real problem for producers to attempt to accomplish what you just outlined. They will not be able to find the people and equipment to do the work that is necessary on a quick turn-around like that. And what they do find will be so tremendously costly that it will probably affect their economics, and they may question whether they do it.

So, I think that if it is not redirected in the very short term the other questions may be entirely academic.

The **Chairman**. Thank you very much.

Senator Domenici.

Senator **Domenici**. Thank you very much, Mr. Chairman.

First, Mr. Harrison. I want to apologize. I called you Mr. Robertson a little while ago.

Mr. **Harrison**. I like that name, too.

Senator **Domenici**. Nice name, anyway.

Let me thank all three of you. I think your testimony has been extremely helpful, and from my standpoint I find the information that you are giving to this committee to be absolutely conclusive.

And I have no questions. I just want to make one last observation. And I'm going to plagiarize. Mr. Sawyer, you did not get to read one little paragraph on Page 7, and I'm going to read it, and put in a few of my own words, because I believe it is absolutely the truth. And I'm going to add a little bit more to it. This statement says:

> We do not call for a oil import fee lightly, but it is clear that the OPEC cartel is engaged in predatory pricing to force competitors out of the market. Indonesian oil minister Subroto recently stated that the most recent pricing policies of OPEC are designed precisely to maximize profits for OPEC members, and at the same time not stimulate U.S. drilling activity.

That's the end of your quote.

I want to add this: I believe if you would have thought a little more, and he knows and they all know, that they would have said in addition to "not stimulate activity" clearly "to acquire larger and larger shares of the American market." That follows, but I think they really know it.

And, third, for this great country, "They are going to continue to do this in a price range where even American alternatives will not come on board." We are just going to be strangled. When the time comes that they're going to turn it on again, we're going to have no industry. Natural gas in an utter state of confusion. And we have been nice, happy, inflation is down. Everybody thinks hunky-dory. And there won't be any alternative around.

And I repeat: Instead of just gas lines—I said soup lines awhile ago, but at that point the machine called the American economy will be in somebody else's hands, because without energy this machine called American productivity is dead. I mean we are consumers of energy because we produce a lot.

You know, I'm not embarrassed that America uses more energy than any other country. We produce more, too. You know, that's kind of the tit for the tat and it's been pretty good for us and pretty good for the world.

Thank you all very much. [Applause.]

The **Chairman**. Senator Breaux.

Senator **Breaux**. Thank you, Mr. Chairman. And thank you, members of the panel. I just have a short question.

You know, Senator Domenici has introduced legislation which Senator Johnston and I both have co-sponsored in the U.S. Senate, called the Energy Security Act or the Domenici Oil Import Fee. It calls for a $4 a barrel import fee. It would produce probably about a little over $10 billion in new revenues to help offset the deficit.

That's going to be a struggle to get that through, but Congress has already given the President authority to impose whatever he thinks is necessary if they make a finding that to do so is important to the national security of the U.S.

Last year the President appointed a commission to study the problem. And if they make a finding that is important for the national security of the U.S. he has the authority unilaterally to go ahead and impose an import fee without Congress, without the Domenici bill, without me, or Senator Johnston as Chairman of the Energy Committee having to go through all of the legislative process. They have the authority to make a finding that it's important to the national security of the U.S.

They could do the same thing we did, Congressman Tauzin and I in the House, and Bennett in the Senate, on the Sugar Import Bill. We have the import fee on sugar when the price goes below a certain price level. It works very well and doesn't have any bureaucratic nightmare administering it. It's working fine, and nobody even knows it goes on and comes off.

Is there any doubt in your mind that this is a national security issue, as well as a keep-you-in-business and keep-our-workers-working issue? Can you justify it based simply on national security?

Or some would argue, "Look, let's just import the oil. If we've got all we need we can run the planes, and run the ships with imported oil."

Is it a national security issue, too?

Mr. **Goodrich**. Senator Breaux, I think that's exactly where it is. I think if it was not a national security issue we shouldn't be up here proposing it. You know, if in fact the oil industry was a dinosaur that was no longer needed for this country, we ought to go the way of vaudeville.

But the fact of the matter is that there's nothing more essential to the future of this country than an energy independence. And as I said in my statement, we spend billions and billions of dollars on defense but we don't have any defense without energy. What are we going to run our planes and tanks, and everything else that we spend those billions on?

Senator **Breaux**. That's the exact point, Mr. Chairman, that has to be taken to this Administration. They can argue about buying your shoes from Taiwan, and your cars from Japan, but you can't argue I think consistently with national security that it's all right to get energy from OPEC nations who do not have our best interest at heart. That policy is a disaster. It could be changed very quickly.

Thank you, Mr. Chairman.

The **Chairman**. Thank you very much, Senator Breaux.

And I want to thank each member. [Applause.]

I want to thank each member of this panel. This has been an excellent panel. We're going to take the facts and figures and your statements back to Washington and, hopefully, publicize them very widely. We appreciate it very much. Thank you so much. [Applause.]

Our next panel will be composed of two Louisianians, outstanding Louisianians who are also in the oil and gas business but who have companies that are a little bit larger in size than those that we just heard from. We're going to hear from Mr. James Moffett, who is the Chief Executive Officer of Freeport-McMoRan, Incorporated from New Orleans, and Mr. E.L. "Chick" Williamson, Chairman and CEO of the Louisiana Land and Exploration Company in New Orleans.

Gentlemen, welcome to the Committee. I'm sorry, again, we're running so short on time. I'm sure you can see our clock ticking, and we appreciate so much your presence here.

We'll begin with Mr. James, Jim Bob Moffett of Freeport-McMoRan.

STATEMENT OF JAMES R. MOFFETT, CHIEF EXECUTIVE OFFICER, FREEPORT-McMoRan, INC., NEW ORLEANS, LA

Mr. MOFFETT. Thank you, sir.

Mr. Chairman, distinguished members of the Energy Committee, and other Congressmen and Senators. Let me say that I want to try to, because we are running short of time I want to get really to the heart of what I think we can offer.

As you know, Freeport McMoRan is a public company, and public companies in this great country are ruled by shareholders. The shareholders demand that we react to situations. And, therefore, our actions in the last decade have been those that the shareholders ask us to do representing them as management.

First of all, when the embargo was clearly in place, and the pricing policies that led to the price of oil up from $3 a barrel to a high of just over $40 a barrel, and natural gas as has been stated, went up in a commensurate fashion, our exploration budget and our production budget went up over $300 million. In other words, on an annual basis we are spending at Freeport-McMoRan over $300 million a year in E&P.

This year in 1987 we have budgeted less than $40 million for E&P. Now, there's two reasons for that. First of all, our cash flow has been cut exactly in half. In other words, we do not have the cash flow from the same amount of oil and gas that was flowing that provided us the ability to spend that sort of money.

Now, it's easy to say spend $300 million in E&P. But, I think that one thing needs to be said and said very clearly. When the make decisions on behalf of shareholders to spend $300 million in exploration and production there's one difference in that decision and some decisions that are made on a financial basis. And that is you have to be prepared that if a hundred and fifty to a hundred and seventy-five million of that's going to go into exploration, when you belly up to the board and make the decision to recommend that sort of budget to your shareholders you have to know that that entire budget can be for naught.

And after the publication of things like the Stone Dome and the Baltimore Canyon where there was over $2 billion left on the table by the industry. The Destine Anne Cline over $2 billion left by the industry, and the much publicized Mont Luck prospect where over a billion dollars on one well was spent by the industry to try to increase the reserves of this U.S., when you approve that, when you approve those sort of budgets you have to also be able to prepare your shareholders that the entire hundred and fifty to hundred and seventy-five million dollars may be spent with no return, zero return. A very difficult situation for the management of a public company to recommend to shareholders, because none of our shareholders understand the risks and why something can come up completely worthless.

So, what have we been doing since 1974—excuse me, since 1984? We've had to make the decision to start reducing our budgets. We've been on an acquisition trail. And our company has acquired a billion three hundred million dollars worth of oil and gas in the ground. And all of the companies that we purchased were in bankruptcy or on the verge of taking bankruptcy.

In other words, we bought reserves as opposed to spending the dollars. Now, why did we as management make that decision?

Well, first of all, when you buy reserves in the ground you don't have a situation where you're going to spend the money and it's going to be valueless, because in all cases reserves are in the ground; you can take engineering reports and go evaluate those. So, therefore, as management of a public company we've been forced to make a decision which is a lot less risky.

In other words, we're not spending money for something that may be worth nothing. We know the oil is in the ground. It's a case of us taking the, have the opinion of whether or not we're buying at the so-called low part of the market. Now, that's a very difficult one to understand and determine. But we've bought these oil and gas reserves starting in 1984 and, of course, in some cases we've spent a hundred million dollars on some reserves in Louisiana, $70 million on reserves in Louisiana. Oil was selling at $28 a barrel. And all of a sudden the price drops to $10 a barrel.

Some of your shareholders when you walk in the room give you a very difficult stare, because even though you weren't risking a hundred percent of their money they want to know why did you buy the oil and gas at $28 when oil was selling for $28 a barrel, and now it's at $10.

So, we have to be prepared as management of public companies to be able to take a lot of heat.

Now, people have asked about the oil import fee, and what does that price need to be. Maybe I can give you some statistics which have really been the format of our ability to purchase oil and gas reserves.

For instance, in our acquisitions the last billion one hundred million dollars of reserves that we purchased, we bought those reserves at a little less than $5 a barrel of oil and gas that we are buying in the ground. And I really want to stress this. The industry average in 1985, we do not have the statistics yet for 1986, but the industry average in 1985 for finding a barrel of oil and gas in the ground was $8 a barrel. Now, some people did better, some people did worse. But the industry average was $8 a barrel.

Now, compare this, if you will, to the ability to buy oil and gas in the ground for less than $5 a barrel. Now as management of a public company we have no choice but to represent our shareholders and go out and buy the oil and gas in the ground, because we can buy it for a little less than $3 than it cost the industry on an average to find in 1985. Now that number will probably come down some in 1986. As I say, the statistics are not completely available.

It'll come down for two reasons. Number one, there was less money spent in the industry. And when people spend less money the higher the quality of the prospects, because you eliminate the more risky prospects.

The second thing that will happen is that the cost of services, third-party services continue to come down. That probably stabilized in 1986 because we have people in the industry who are really operating at bare bones and they're not even getting back their operating costs on drilling rigs and third-party services. So that's pretty much bottomed out.

But the very fact is that when we went into this acquisition trail we as management of a public company could not, since we had the wherewithal to do it, pass up these opportunities to buy oil and gas in the ground.

Now, here's the point I want to make about what the price of oil needs to be to get this industry back in place. We talk about whether it should be twenty-two, twenty-five, et cetera. There's a rule of thumb when you are valuing oil and gas in the ground. And you need to be aware of this, because this is what we have to look at.

That is, if gas is selling at the wellhead at a $1.50 in MCF, you can pay about $.50 in MCF in the ground. If oil is selling for $10 a barrel, we can pay about $3.30 a barrel in the ground. If oil is selling at $30 a barrel, we can pay $10 in the ground.

Now, this is the one you must focus on. If the national average for finding oil and gas was $8 a barrel in 1986 when mostly high quality prospects were being drilled, we must have a price for our product which makes the price of a barrel of oil that you go out and explore for worth more than that you can buy for, because it's been proven that we can't find oil and gas for less than $8 a barrel in the ground.

Now I might point out to you when the fur was flying in the middle 80's and the early 80's, when there was a lot more money being spent in the oil and gas business, that price was over $12 a barrel. So, if we're going to induce exploration and get people back to work we must, we must be able to show that a price of oil on a three-to-one ratio at the wellhead is more than what it costs you to find it. If not, you're trading dollars,and there's no way that we as public company management can recommend to our shareholders that we pour money back into the ground.

Now, I think that that would help you understand why the price level has to be where it is. That three-to-one ratio of a wellhead price to what you can pay for it in the ground, or what generally people value oil and gas in the ground for.

Now let's talk about for a minute some of the other important issues, and I'm going to skim very fast to leave time for Chick so you can have questions. But, I should point out one thing to you. We talk about national security, and we are here today hyping the oil and gas exploration risk taking, but I will tell you that this country in general has pulled back from a risk-taking economy. We are a service-and-fee economy. That's why the stock market is at all-time highs today, the investment banking services, the lawyers, the accountants, et cetera, that are making money off consolidating the industry in this country is where all the money is being made.

We're in the mining business. And I know you can relate to this. But, for instance, when we would not step up and protect the copper industry in this country with some sort of a bottom price, and it was said that if we don't put a bottom on the price that foreign copper is coming into this country; i.e. we had third-world countries that were bringing copper into this country, that were producing at a loss. We at MBank, the World Bank, were financing a copper industry in Chili, in South Africa, and we were not requiring them to operate at even break even. We let them, to be able to create exchange operate at a loss, and two-thirds of that money from the World Bank came from the taxpayers of the U.S.

So, we were in here subsidizing copper companies to bring copper into this country, and we're not requiring those people to operate even on a break even. We went to the World Bank and asked them: "Please, at least make these people break even. Don't let them produce at a loss, and you won't need to worry about the price decrease."

But what did we do? And I compare this, because if we don't take the same reaction now the entire copper industry in this country, except for a few high-quality mines, has been completely shut down. Now it didn't get the kind of publicity we're getting down here, because most of the people didn't go on unemployment. They went back to work on ranches out in the West. And it was a very sparse area, so you didn't have the high density of economy.

But the mining industry died because we would not take a position. And I know you are very well aware of it, Senator Domenici, but I will tell you that this is a mirror. All we have to do is look and see if we don't stop this that the foreign countries will put us out of a business and do irrefutable damage, because most of those copper mines just like the stripper wells will not be put back into service because you'll never be able to go back in and get the water out of those mines, et cetera.

So, it's a good parallel. It happened to us just three years ago. We wouldn't take the position. And we let the foreign copper put us out of business.

Now, let me just say that you used the words "predatory pricing." I want to emphasize that if we don't recognize that the OPEC policy started by Mr. Umadi, and Mr. Umadi was not underhanded, he stated in many world newscasts that he was going to put a price, a predatory price which would shut us down. He said, "This is not good for your country."

But we, because of our idea that we wanted zero inflation, a very big gamble in the last eight years, seven years, we wanted zero inflation, we felt low oil prices was necessary for zero inflation.

I submit to you, gentlemen, that zero inflation in this country has also meant zero growth. So, a very difficult problem.

Free trade——

The CHAIRMAN. Let me interrupt you right there and tell you that a lot of people blame Jake Umadi, but I can tell you that Jake Umadi is a great friend of the U.S. compared to the Ayatollah. [Laughter.]

Mr. MOFFETT. I agree with you and, respectfully, I only pointed out that he's the only one that started the ball rolling and was most public about it. So, he is a great friend of these——

The CHAIRMAN. Let me also interrupt to say that Secretary Schlesinger testified the other day that Shake Umadi, who by the way is no longer the Saudi oil minister, told him that Americans are going to curse those who make policy in this country if we let the oil industry go down the drain.

Mr. MOFFETT. Yes, sir.

The CHAIRMAN. That's from a Saudi Arabian oil minister. [Applause.]

Mr. MOFFETT. Now in this country, let me point out a couple of things when we're talking about national security. We're talking about national security, and there's another word we ought to put in this. We're talking about consumer security, because the consumers in this country today and those people that are representing, and the people that buy our oil and gas, if you'll go sit down with them in the high-density populous areas that are buying our gas at the tailgate of these plants, every one of them will tell you that they're being forced by utility commissioners to buy gas on the spot market. They have no long-term contracts. And they'll tell you that they know that they're going to be hurt in the long term.

And you know what most of them tell you? This is a very interesting observation. None of the main purchasers in those utility companies ever get that job until they're about sixty-one or two years old because they have to go up through the bureaucracy. And you know what their reply to me has been when I ask them "What about your long-term purchasing policy?" They say, "I'm going to be retired by that time. I'm going to let the next generation bother with it."

So I can tell you not only national security, but consumer security is at stake here when we talk about a domestic energy policy.

Now, as I talk about national security and consumer security, everybody says "Let's run this country on imposed oil." Gentlemen, what do you think is going to happen when mamma turns on the burner in the Northeast and out of that natural gas stove up comes No. 2 crude? We're going to have quite a surprise. And you cannot put No. 2 crude, much less No. 6 crude—I ask people when I'm on my financial tours, I ask them, "Have you ever seen a barrel of No. 6 crude?" Because they're saying that natural gas ought to be priced with No. 6 crude, and these people have no idea what a barrel of No. 6 crude looks like.

And for those in the audience that don't know, you can't even pour it below 40 degrees; you almost have to shovel it. So when it gets cold up there I want to see people put No. 6 crude in those pipelines, and we know that's impossible, but No. 2 crude in pipelines, gas pipelines, into all of these gas burners up there is ludicrous.

So, we cannot import all of the energy that we need. We have to have some natural gas. We spent the whole early sixties and early seventies convincing people that natural gas was a clean fuel. We have switched people from fuel oil to natural gas so that they can get the gas to them, because when the rivers freeze up and all the roads are frozen up you can't get fuel oil into these people's houses. And that's why they've all gone to natural gas.

You cannot import natural gas. El Paso Natural Gas tried that in the early seventies. Ended up cutting up two ships that were over $500 million investment.

To deliver Algerian gas to the Port of New Jersey in 1974 was going to cost over $7 in MCF. You cannot import natural gas on a competitive basis in this country.

So, we have consumer security here, and we have national security that are very much at stake. And we've got to wake these consumers up because they are shooting themselves in the foot.

The lag time for the industry, we've—[Applause.]

The lag time in the industry we've already talked about. I'm not going to discuss anything, except to tell you that the infrastructure has definitely been dismantled. Our staff that between 1980 and 1986 found over 150 million barrels of oil to the interests, on our exploration effort in the last two years we've been spending all of our creative time trying to figure out how to buy companies that were in trouble. We've used all of our creative ability. We have kept some exploration people in place. But our infrastructure has been completely thwarted because of the fact that we are now having to concentrate, because we represent shareholders we're having to concentrate on acquisition.

Now, let me talk one last thing, because this is also very important. We just passed a tax bill, and everybody feels that the tax bill long term is going to be good for the country. But I want to tell you for us to try and rebuild an oil and gas industry with the tax bill in place is going to be devastating, because we're not going to get individual investors to come in to limited partnerships, et cetera, and drill for oil and gas.

They are now spending seventy-three cent dollars, and we had a tough enough time when we were spending thirty-cent dollars. In other words, tax rates were seventy percent in this country and people would have spent a thirty-cent dollar.

We've now reversed that. I can tell you that people are not going to put a seventy-three cent dollar into a risky oil and gas venture.

For corporations, the corporations in our business have had a tax increase because of the minimum tax. We used to, people talked about us not paying taxes. We were paying taxes in a much different way. We were drilling up all of our tax. We were creating jobs in this great State and in Texas, and all across the energy belt by using our tax dollars to offset—our drilling to offset our tax dollars.

Now with the minimum we have to calculate that we have to leave so much money in the kitty to be able to pay this minimum tax, and that means we have to cut our budgets.

So, therefore, we've had a tax increase from a corporate standpoint. And from an individual standpoint the individuals are now spending a dollar that's worth seventy-three cents on the dollar. And I'm going to tell you, you go to New York and try to get these belt-and-suspenders people to spend a seventy- three cent dollar in an oil and gas well that could be a total dry hole, and I'll guarantee you they'll think you're crazy as a peach orchard bore. [Laughter and applause.]

The oil import fee, and the other legislation that we've talked about, the repeal of the Fuel Use Act, we need to establish one premise here today. This industry is dead in the water. This industry must be rebuilt. We need incentives, not disincentives. And we've spent the last three years piling disincentives on top of this industry, and we were throwing water on a drowning man.

Let's get some sense in this nation, and get back to work.

Thank you. [Applause.]

[The prepared statement of Mr. Moffett follows:]

TESTIMONY OF JAMES R. MOFFETT, CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF FREEPORT-McMoRan Inc.

Mr. Chairman and Distinguished Members of the Energy Committee, I appreciate very much the opportunity to personally share with you some thoughts regarding the health of the domestic oil and gas industry, the prospects for its future, and the things that need to be done to restore and enhance its health, vigor and viability.

The health of the domestic oil and gas industry is listed as critical and is being sustained only by mechanical life support equipment. All of the industry's vital signs clearly reflect the critical condition of the patient. Included here are matters such as the number of active rotary rigs, the seismic crew activity, the annual additions of proved reserves, and the exploration and development budgets.

I am sure the Committee Members are well aware of the statistics of these vital signs and need no reminder from me as to the seriousness of the situation. Your mere presence here indicates your serious concern for the patient. The facts have been well documented and are available from a variety of sources, some of which I have available with me, should you so desire.

The symptoms of this malady first began to appear in 1982-83 when pipeline companies began curtailing natural gas production and ceasing to honor contract provisions on take-or-pay and prices--all as a result of the so-called "Gas Bubble." The patient's condition was soon further aggravated by bankruptcies, layoffs, reductions in force and budget reductions. The generally deteriorating condition was finally overwhelmed by a combination of OPEC's decision to reduce the price of crude oil in 1986, the actions of the Federal Energy Regulatory Commission in the issuance of Orders 436 and 451, and the passage of the Reform Tax Act of 1986.

The current devastating condition in the domestic oil and gas industry also results from the federal government position that free market forces should prevail in establishing free market pricing. I submit that the world imbalance in the supply and demand for oil and the massive supply of oil controlled by the OPEC cartel and other countries working in consort with OPEC has resulted in a very planned and coordinated policy of predatory pricing to bankrupt and eliminate the independent oil producers of the United States--the heart of the energy business here. OPEC leaders have made clear their intention through the media that the aim of their predatory tactics is to eliminate U.S. competition during the period of oversupply thereby allowing the OPEC cartel to take advantage of its market control position and force prices substantially higher when competition has lessened. Even today we see free market levels being interrupted by the power and clout of low-cost OPEC oil as prices are set artificially by managing production thwarting market forces. Where is our national security policy? Doesn't the most powerful country in the world need to insure adequate levels of energy for its survival? Gentlemen, if our energy policy does not change, I am afraid we will become economic hostages to some of the more extreme elements that are gaining control of OPEC. The situation is serious and requires action.

In a broader sense, the energy position of the United States has continued to erode. Nuclear power, because of the unfortunate Three Mile Island accident and environmentalists concern abut the safety of this developing industry, has been significantly curtailed. The coal industry, because of the pressures brought by the predatory pricing by OPEC, has also been decimated. Syn fuels which seem to have great promise for the longer term future has been discarded by the government. Where is our long term energy policy? Is the United States, its national security, its consumers, and its industry going to be held ransom because of a lack coherent national energy policy?

I submit to you that the current energy policy or perhaps the lack of any energy policy may be bringing short term benefits to our consumers but this temporary content will fade quickly as domestic supplies of oil and gas dry up as a result of lack of drilling and we become increasingly dependent on foreign energy sources. We will pay "the piper." For national security reasons and long term consumer security it is absolutely essential that the United States establish a coherent long term energy policy aimed at protecting the United States oil and gas industry and the U. S. consumer.

These foregoing factors have resulted in the total decimation of a once healthy and vibrant industry, both in the ranks of the majors and the independents. The total industry is today but a weak shadow of its former self.

As to the prospects for the future, the prognosis is largely dependent upon the wisdom of your Committee and that of your colleagues in the Congress.

We must first be realistic regarding the severity of the condition of the patient industry. Throughout the industry, including the large and the small, companies and exploration and development teams and organizations have been systematically and thoroughly dismantled and scattered into other segments of our economy. This applies as well, if not more so, to the oil and gas service/supply industry which has lost not only its personnel and organizations, but the majority of its equipment as well.

The important, overriding factor here is that if the external factors, which so violently and effectively attacked the patient's health, were somehow suddenly eliminated, the patient still faces a prolonged period of rehabilitation and recovery. The oil and gas industry is a lag time industry. The lead time for the reassembling of experienced exploration organizations, the accumulation of geological and geophysical data, the assembly of prospect lease blocks and the necessary equipment, supplies and services resources will indeed be a long one. Once a prospect has been identified, drilled, discovered and tested, there is a further lag time involved before the property can be developed and brought on production. This is particularly true in the offshore, where lead time between discovery and production can be

3-5 years. It just cannot be done overnight. There are no short cuts. The oil and gas industry will have recovered its health and vigor only when these resources have been reassembled on a substantial scale by both majors and independents.

In reading the patient's chart, it is clear to some observers, including yours truly, that some of the maladies currently affecting the patient, i.e. low prices for oil and gas and curtailed gas production, will begin to change within the near future. With both drilling activity curtailed and reserve additions drastically reduced, it is simply a matter of time before we will be facing another natural gas shortage. This will result in increased prices. As a Nation, we are already experiencing increasing quantities of imported crude oil as our domestic crude production decreases, further deepening our international trade deficits.

It is for these reasons that FMI, along with numerous other companies, have turned our attention and efforts to exploring for oil and gas reserves on Wall Street. With a crippled industry and reduced prices, it is proving more cost effective to purchase reserves from economically troubled companies than to explore for reserves in the more conventional manner with all the risks normal in oil and gas exploration.

Your Committee, your congressional colleagues, and our Nation must first address and decide fundamental issues of national policy. These issues simply stated are "Does our Nation intend or desire, in periods of international crisis, to be dependent on other nations for supplies of crude oil and natural gas?", and, "Does our Nation intend or desire to be vulnerable to manipulation of its economy by a small group of middle eastern oil producing nations?" Remember that this will have a significant impact on long term supplies of natural gas which is so essential to the U.S. consumer energy supply. It is not economically feasible to liquify gas and transport it over the oceans. Although our neighbors, Canada and Mexico, have some natural gas this supply is limited and subject to sharp price escalation, as we have seen during the last shortage. Do we want the households of the northeast to be dependent on high-priced gas shipped from the middle east?

If the answer to these questions is "no," as I suggest it should be, then it is absolutely necessary that drastic remedies must be applied immediately to the patient's condition in order that the long process of rehabilitation and recovery necessary to restore the patient to health, vigor and viability may be commenced.

In the industry's present status, not only is it failing to make additions to its domestic reserves of oil and gas, we do not even have the infrastructure of organization, personnel and equipment necessary to begin the level of activity necessary to reverse this trend, assuming the reason and incentives to do so were readily available. Surely, this is not a position which this Nation should knowingly allow.

Mr. Chairman, now that I have given you my views on the present unhealthy state of the domestic oil and gas industry I would like to make a few comments on what could be done to restore and enhance the general viability of the industry.

One major concern to be aware of is that the industry itself has not reached a consensus as to what should be done. This is regrettable but it is understandable. Since many companies in our industry are engaged in multinational, world-wide oil and gas operations, they have different perspectives than companies attempting to maintain an on-going, viable oil and gas exploration and production operation primarily in the United States.

Now let's get down to some specific ideas. First, in order to help tighten the natural gas markets in this country the artificial demand restraints that have been put into place over the years should be repealed. This includes an elimination of the mandatory restrictions embodied in the Fuel Use Act and the price distortions and resulting market loss caused by the so called "incremental pricing" provisions of the Natural Gas Policy Act. These are small but obvious steps which, I believe, are agreed upon by almost all knowledgeable observers.

Second, the President and the Congress must realize that insofar as the domestic oil and gas industry is concerned, the so-called Tax Reform law was a devastating, if not mortal, blow. It was for us a tax increase bill. The new alternate minimum tax provisions caused very serious problems with the independent producers. Some funds that were available for drilling must now be used to meet the new minimum tax requirements. Effectively, we can no longer write off all of our drilling costs. Quite frankly, unless prevailing attitudes change, I hold little hope for meaningful adjustments in the Tax Reform Bill for the domestic oil and gas industry in the near term. But, I must emphasize that we as an industry simply cannot survive further tax increases.

The Tax Reform Act also had a significant adverse impact on capital formation and risk capital availability. In addition to the tighter restrictions on deductibility of intangible drilling costs and the alternate minimum tax, the decline in the tax rate to 28% will have a dire effect on raising risk capital for exploratory drilling. The average investor will no longer be willing to risk his savings given the very significant risk inherent in exploratory drilling. The tax incentive for investing in oil and gas exploratory programs has been eliminated. A way must be found to overcome this serious detriment to new capital formation for this industry.

There has been one bright spot in the tax area for our industry. It is the Master Limited Partnership. This is, as you know, a new and innovative use of a widely recognized and long standing form of business known as a "limited partnership." That part is nothing new. What is new is the idea of listing "units" of these partnerships on the major stock exchanges. The result makes this investment tool available to the average investor. The industry benefits by tapping badly needed new sources of capital and hopefully in raising the market values of the underlying assets. The average investor benefits because he can now participate in a new investment opportunity as a direct owner by being a "limited partner" in oil, gas, and other businesses. As a practical matter, this type of investment opportunity has until now been limited to a very few very wealthy investors. There has been talk in Treasury and in the Ways and Means Committee of attacking Master Limited Partnerships simply because of the way they are marketed. I submit that such a view is totally without merit. To attack a legitimate and long-standing form of doing business simply because it is now open to the average investor makes no sense to me and I believe it is patently unfair.

I would ask you as a Committee to please remove oil and gas and natural resources from the "tax reform" and tax increase tables. We as an industry have had three consecutive tax increases in the last six years --- TEFRA, DEFRA, and the so-called Tax Reform Bill. Congress cannot keep doing this without eventually killing the patient. I feel confident of this conclusion.

Lastly, but perhaps most importantly, I would urge you and the Congress to adopt a variable oil import fee which sets a floor below which this commodity will not be allowed to fall. I would suggest the floor be at a $22-25 range. It is very apparent to those who follow our business that the recent energy market collapse was deliberately engineered by foreign producers. They have openly admitted their intentions. The idea was, of course, to drive out of business the higher cost producers. In this, they achieved astounding success. We have already discussed the critical condition of our patient industry, which in part is a direct result of these deliberate actions. If there was a world wide anti-trust law the foreign producers obviously would be held to be engaging in "predatory pricing." In other words through market dominance and market share they drive prices artificially low, bankrupting smaller competitors and then raise prices much higher when there is no competition left.

A good example of this is the domestic copper industry. Developing countries because of their need for foreign exchange have as a general rule subsidized copper operations in their respective countries and sell that output in world markets at below the true cost of production. Unfortunately, some of our government institutions such as the U.S. Eximbank and international institutions such as the World Bank have supported this unfair world trade practice by providing grants, low cost loans and infrastructure development assistance to these developing countries and projects. The United States ignored pleas to protect domestic industry from this "dumping." This so-called "free market" approach failed to recognize the true facts. The lack of coherent policy on the part of our government and its institutions delivered the "coup de grace" to our domestic copper industry. The situation is very similar and this must not happen to our oil and gas industry. It is just too important to our national security.

For national security reasons--if nothing else--we just cannot allow this to happen. Congress was quick enough to step in to the market place with price controls and windfall profits taxes when they thought the industry was doing too well. Now there is no justification for not stepping in to save an entire U. S. industry when our national security is at stake, and the economic well being of large areas of our country remain in a state of depression.

Mr. Chairman, I believe you all know as well as I the lessons of history in this regard. Another oil embargo is certainly not out of the question if this country allows itself to be vulnerable. Further, one cannot ignore the potential of another world power somehow getting control of or blocking the strait of Hormuz and holding the entire free world hostage by threatening to choke off oil supplies.

The condition of the domestic oil and gas industry is critical. It has been emaciated and debilitated by disease and pestilence which have been diagnosed and isolated. Strong measures are in order and will be necessary in order to start the healing process and the long road to recovery. A healthy and vigorous domestic oil and gas industry is essential to our national security, both militarily and economically. Now is the time for you and your colleagues to write the prescription.

The **Chairman**. Thank you very much, Jim Bob Moffett, for a great statement.

Now we'll hear from E.L. "Chick" Williamson from LL&E.

STATEMENT OF E.L. WILLIAMSON, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, LOUISIANA LAND & EXPLORATION CO., NEW ORLEANS, LA

Mr. **Williamson**. Thank you, Mr. Chairman.

Just to briefly qualify myself for the panel and the audience, I am, as you said, CEO of LL&E. We are New York Stock Exchange listed company, Fortune 500 Company, and I think the largest Louisiana producer of oil and gas by a public company——

Senator **Breaux**. "Chick," try and use that mike a little bit more.

Mr. **Williamson**. This one isn't working? Is that better?

And I think the largest Louisiana producer of oil and gas by a public company domiciled here in the state.

I've been in this business for 36 years, and CEO of LL&E, or Chief Operating Officer for the last 13 years.

Now, we have just gone through a year of trauma in the world oil markets, and the effects on the domestic oil industry, and the oilfield service and supply industry in the major producing states has been devastating. And that's an understatement. And while not yet recognized nationwide there are consequences to this country, both economic and military that are very serious.

We saw oil go from $30 a barrel at the beginning of 1986 to as low as I think about $10 late in the year. It's recovered a bit in the last few weeks. Like Jim Bob, that has had an effect on the management of a public company.

We who are spending, did spend something over $300 million in E&P in 1985, that went down to about a hundred and sixty last year. I've got a budget of something a little bit less than that, $150 million this year. But keep in mind a lot of those projects were projects that we had committed to two or three years ago that we have to fulfill, even though had we had the choice today we might not be doing it.

The point is that if we stayed in a pricing world that we've seen in the last twelve months, that budget's going to go from like $300 million down to zero in a few years. We simply cannot afford as a public company to keep spending money with that kind of pricing.

Now this price collapse that we've seen is simply the result of more oil being in the marketplace than that market wanted. Why would the world produce more oil than the market needs? Well, that's a question that journalists, and Acadians, and historians can play with for a long time.

I do have a personal view. I think this phenomena was not happenstance. It was designed. It was engineered to increase world, and particularly the greatest user of energy in the world, the U.S., particularly this country's dependency on Middle East oil.

But let's not speculate over why this phenomena occurred, but rather look at hard facts. Let's look at exactly what has happened in a short period of time, a period of time of less than one year.

A major industry, and I would argue that it's the single most important industry in this country's economy, has been materially down-sized, it's productivity severely, materially diminished.

Now this isn't a faucet, as has been said earlier, this isn't a faucet that can be turned on and off. It's going to take a minimum of five years if we started today to try to recover to a point of capability and capacity that we had just a few years ago. It'll take a minimum of five years; more likely ten, or more.

An oilfield, a very sophisticated, efficient, oilfield service-and-supply industry that is literally today in shambles. Exploration for new reserves. And the only areas of the country where major new reserves are likely to be found, frontier areas, Alaska, the deep waters off our own coast here in Louisiana and Texas, those projects are either shelved or completely abandoned.

A point was made earlier about alternative sources of energy. And the development of those alternative sources, be they tar sands, oil shales, synthetic fuels of all kind, have essentially been stopped. Domestic production of oil is declining, and imports much of which comes from the Middle East are increasing.

Unless we do something now this nation's level of imports will exceed fifty percent in a relatively short period of time.

The price decline has brought pressure for demand growth. There is less concern today about conservation. The point was made earlier about natural gas reserves. They are declining. We don't have the figures for 1986, but I think when they do come in we're going to see a steepening of that curve, that decline curve for natural gas.

One of the most critical commodities in this country, the Gas Bubble, which we've lived with for several years, in our judgment, looking at our production, and others that we talked to, it's probably going to be gone by the end of next winter.

The sources of capital for investment in this industry, and the search and development of energy, has understandably been scared by the instability in the energy price area, and it's going to need a very high level of confidence in the future before it comes back in the business.

I would be remiss if I didn't mention another consequence of events of the past year, one that I think is not generally understood. That is the tremendous loss of highly trained, experienced personnel, oil finders and production personnel. It's going to take years, and I suggest even decades to restaff this industry with the quality of people it has lost.

Employment across the country. Senator Domenici mentioned earlier in New Mexico. Across the country; that total is like approaching 300,000 jobs in the extractive part of the industry alone in the last few years.

Frank Harrison made this point earlier, and I think the record and the people should listen very carefully, because here's a man who is I think the past president of AAPG, and is very close and very appreciative about effect on this industry. It is a serious price that we have paid.

Now all of this obviously affects our industry, it affects our state, but more importantly it affects our country, our economy, our security, and every household across the country. We have a very serious problem on our hands. A problem that admittedly has been caused by actions external to the U.S. And we can continue to accept the energy environment that those forces have shaped. We can accept an environment that has been designed by OPEC to serve their best long-term interest.

Or we have the opportunity to take actions that are in our best long-term interest. One action, and the only one that I can think of that has short-term benefit is the imposition of an import fee on all imported crude oil and refined products.

I, like Henry Goodrich earlier, I didn't start here. But over the last few months I have come to this position, about which I feel very strongly. I think that fee should be large enough to justify exploration and development of new U.S. oil and gas supplies. The other side of that coin is the reduction of dependence on import.

Now, that fee can take many forms. Two I would suggest, appear to be the most logical one is the fixed fee which I suggest would be on the order of ten to eleven dollars a barrel. The other is a variable fee, which would achieve a floor price for domestic oil in the $25 a barrel or more range.

And I won't go into detail, I won't spend a great deal of time talking about social costs of import. The Committee is obviously well aware of those costs. And unfortunately, I don't think the public is aware of them, but for that incremental barrel of oil that we import it may cost $18 a barrel. But when you figure the affect on our trade balance, when you consider the affect on the economy of areas like Louisiana that doesn't drill to find that barrel of domestic oil, when you look at the cost of our fleet in the Middle East necessary to protect the security of that supply, the total social cost of that barrel may be eighteen, to thirty, or forty dollars a barrel. The Committee is well aware of that. I think it's unfortunate that the public as a whole doesn't realize that they are paying a very high price for that level, for that barrel of imports.

There are other things, actions that can be taken in addition to an import fee that are just as important and absolutely necessary. Unfortunately, they are of a longer term nature. The repeal of this Windfall Profits Tax, which was certainly misnamed and counterproductive.

I think we should go ahead and complete the decontrol process of the wellhead prices of natural gas.

We should look at our federal lands that are prospective, Alaska, et cetera.

I think we do need to continue with our strategic petroleum reserves.

And I think it's terribly important that we look realistically at a national attitude towards environment and tax policies that are constant with a good energy policy.

We do have a serious problem on our hands, one that has frightening consequences to the country, particularly if we look out very far in the future.

We commend the Chairman, and the Committee, for recognizing the problem and trying to increase the level of awareness nationwide.

We appreciate the opportunity to share these views with the Committee, and wish you well in your consideration of what is a terribly important issue to this country.

Thank you.

[The prepared statement of Mr. Williamson follows:]

TESTIMONY OF

E.L. WILLIAMSON
CHAIRMAN AND CHIEF EXECUTIVE OFFICER

THE LOUISIANA LAND & EXPLORATION COMPANY
NEW ORLEANS, LOUISIANA

BEFORE

SENATE ENERGY COMMITTEE
FIELD HEARING
BATON ROUGE, LOUISIANA

FEBRUARY 9, 1987

THE U.S. OIL INDUSTRY HAS BEEN SUFFERING HARD TIMES SINCE THE EARLY 1980'S. FOLLOWING THE WORLD OIL PRICE COLLAPSE IN EARLY 1986, THE STATE OF THE INDUSTRY HAS CHANGED FROM ONE OF CONTRACTION TO ONE OF FULL-FLEDGED DEPRESSION, UNMATCHED FOR THE PAST 50 YEARS AT LEAST. THIS SITUATION CARRIES WITH IT A SERIOUS THREAT TO THE WELFARE OF THE WHOLE NATION.

AS AN EXAMPLE OF THE RIPPLE EFFECTS OF THIS DEPRESSION, CONSUMPTION OF DOMESTIC STEEL FOR OIL INDUSTRY APPLICATIONS HAS FALLEN BY OVER 1.1 MILLION NET TONS SINCE 1982, A DECLINE OF 71%! CONSUMPTION OF IMPORTED STEEL FOR SUCH APPLICATIONS HAS DECLINED BY 2.8 MILLION NET TONS, A DECLINE OF 73%.

THE SAME FORCES WHICH ARE CURRENTLY DEPRESSING DOMESTIC PETROLEUM PRODUCTION ARE LEADING TO A DRAMATIC INCREASE IN THE NATION'S DEPENDENCE ON FOREIGN SOURCES OF OIL. RECENT HISTORY SUGGESTS THAT THESE SOURCES MAY PROVE TO BE BOTH DANGEROUSLY INSECURE AND UNAFFORDABLY EXPENSIVE WHEN THE CURRENT WORLDWIDE GLUT ENDS, A DEVELOPMENT WHICH IS LIKELY TO OCCUR SOONER THAN MANY EXPECT, POSSIBLY WITHIN THE NEXT THREE TO FIVE YEARS.

THE TRENDS ARE CLEAR:

COMPARED JUST WITH CORRESPONDING PERIODS IN 1985, WHEN THE DOMESTIC OIL INDUSTRY HAD ALREADY EXPERIENCED FOUR YEARS OF FALLING PRICES:

- DOMESTIC OIL PRODUCTION HAS BEEN FALLING AT AN ACCELERATING RATE. IT ROSE BY 1.7 PERCENT IN THE FIRST QUARTER OF 1986, BUT THEN DROPPED BY 3.4 PERCENT IN THE SECOND QUARTER, 5.0 PERCENT IN THE THIRD QUARTER AND 6.7 PERCENT IN THE FOURTH QUARTER. THIS ACCELERATING PATTERN IS NOT APPARENT IF ONE PAYS ATTENTION ONLY TO THE FULL YEAR DROP OF 3.4 PERCENT. IN FACT, BETWEEN FEBRUARY AND DECEMBER 1986, U. S. OIL PRODUCTION DECLINED 9 PERCENT, OR 800,000 BARRELS A DAY.

- WELLS REPORTED WERE DOWN BY 17.4 PERCENT FOR THE FIRST QUARTER, 50.0 PERCENT FOR THE SECOND, 58.9 PERCENT FOR THE THIRD AND 39.1 PERCENT FOR THE FOURTH QUARTER.

- THE RIG COUNT, AN INDICATOR OF FUTURE OIL RESERVE REPLACEMENT AND PRODUCTION LEVELS, DECLINED BY 33.4 PERCENT IN THE FIRST QUARTER, 57.3 PERCENT IN THE SECOND QUARTER, 62.4 PERCENT IN THE THIRD QUARTER AND 53.3 PERCENT IN THE FOURTH QUARTER.

- o EMPLOYMENT IN OIL AND GAS EXTRACTION DROPPED BY 25.6 PERCENT BY THE END OF THE THIRD QUARTER. THIS TRANSLATES TO A LOSS OF CLOSE TO 150,000 JOBS IN OIL AND GAS EXTRACTION ALONE -- AND MANY THOUSANDS MORE IN OIL SERVICES AND OTHER INDUSTRIES DEPENDENT ON THE OIL AND GAS SECTOR.

- o BUSINESS FAILURES, WHICH FOR THE NATION AS A WHOLE WERE UP 8.1 PERCENT IN THE FIRST HALF OF 1986, ROSE BY A STAGGERING 53 PERCENT IN THE WEST SOUTH CENTRAL REGION WHICH INCLUDES TEXAS, LOUISIANA AND OKLAHOMA.

- o BANKRUPTCY FILINGS IN THE THIRD QUARTER WERE UP BY 57 PERCENT IN TEXAS, 54 PERCENT IN LOUISIANA AND 66 PERCENT IN OKLAHOMA.

EVEN A CURSORY GLANCE AT THESE FIGURES REVEALS AN INDUSTRY IN DEEP DISTRESS. BUT THE TRENDS THEY REFLECT ARE PART OF A PATTERN WITH GREATER NATIONAL SIGNIFICANCE.

- o THE NATION'S OIL CONSUMPTION HAS BEEN RISING. COMPARED WITH CORRESPONDING PERIODS IN 1985, IT WAS UP BY 1.2 PERCENT IN THE FIRST QUARTER

OF 1986, 2.4 PERCENT IN THE SECOND, 4.2 PERCENT IN THE THIRD AND 3.8 PERCENT IN THE FOURTH QUARTER.

CONSEQUENTLY, THE GROWING GAP BETWEEN INCREASING CONSUMPTION AND FALLING PRODUCTION HAS BEEN FILLED BY RAPIDLY RISING IMPORTS OF OIL, PRIMARILY FROM OPEC SOURCES.

o TOTAL OIL IMPORTS GREW BY 14.7 PERCENT IN THE FIRST QUARTER, 15.5 PERCENT IN THE SECOND QUARTER, 45.5 PERCENT IN THE THIRD QUARTER AND 12.9 PERCENT IN THE FOURTH QUARTER, GIVING AN INCREASE FOR THE YEAR OF 21.8 PERCENT COMPARED WITH 1985. IMPORTS FROM NATIONS BORDERING THE PERSIAN GULF GREW BY 300 PERCENT.

WITH A CURRENT LEVEL OF IMPORT DEPENDENCE OF 38 PERCENT, THE NATION RELIES ON IMPORTED OIL TO A GREATER EXTENT THAN IT DID ON THE EVE OF THE ARAB OIL EMBARGO.

IF DEPRESSED PRICES PERSIST, THESE TRENDS IN BOTH PRODUCTION AND CONSUMPTION WILL CONTINUE BOTH IN THE U.S. AND WORLDWIDE. AS NON-OPEC PRODUCTION IS DISCOURAGED WHILE CONSUMPTION GROWS, THE DEMAND FOR OPEC OIL WILL BE STIMULATED. WITHIN A RELATIVELY SHORT TIME -- THREE TO FIVE YEARS IS NOT AN UNREALISTIC ESTIMATE -- THE INCREASE IN U.S. DEMAND

FOR IMPORTS ALONE COULD ABSORB MOST OF THE SURPLUS, LEADING TO A TIGHT WORLD OIL MARKET REMINISCENT OF THE TROUBLED 1970's.

A 1986 SURVEY OF U.S. PETROLEUM PRODUCERS CARRIED OUT BY THE AMERICAN PETROLEUM INSTITUTE SHOWED THAT, ASSUMING OIL PRICES IN THE $15 PER BARREL RANGE, BY 1991 WE WOULD SEE:

- A DECLINE IN U.S. OIL AND GAS PRODUCTION AMOUNTING TO THE EQUIVALENT OF 5 MILLION BARRELS OF OIL PER DAY, MORE THAN 25 PERCENT OF THE NATION'S 1985 TOTAL PETROLEUM PRODUCTION.

- A DROP IN ANNUAL INVESTMENT IN EXPLORATION AND PRODUCTION ACTIVITIES FROM THE $70 BILLION OF 1985 TO $32 BILLION IN 1991.

- A DECREASE IN THE NUMBER OF WELLS DRILLED ANNUALLY FROM CLOSE TO 75,000 TO JUST OVER 30,000.

- A DECLINE IN PETROLEUM EMPLOYMENT OF 300,000 JOBS.

- AND AN INCREASE IN OIL CONSUMPTION ESTIMATED

BY THE NATURAL PETROLEUM COUNCIL AT CLOSE TO 2 MILLION BARRELS A DAY.

IN RECENT MONTHS, OPEC HAS SUCCEEDED IN BRINGING UP THE WORLD PRICE FROM $15 TO THE $18-19 RANGE. BUT THE API SURVEY JUST CITED SHOWED THAT EVEN WITH OIL AT $20 PER BARREL, BY 1991 THE DECLINE IN U. S. OIL AND GAS PRODUCTION WOULD BE CLOSE TO THE EQUIVALENT OF 2 MILLION BARRELS A DAY COMPARED WITH 1985.

REGARDLESS OF THE PRECISE VALUE, THESE FIGURES IMPLY THAT BY THE 1990'S THE U. S. MAY BE DEPENDENT ON FOREIGN SOURCES FOR OVER HALF OF ITS OIL CONSUMPTION, A CONSIDERABLY HIGHER FRACTION THAN WAS THE CASE IN THE 1970'S.

OF NECESSITY, THESE IMPORTS WOULD LARGELY BE SUPPLIED BY OPEC, WHOSE MEMBER COUNTRIES HOLD ABOUT 75 PERCENT OF THE WORLD'S PROVED OIL RESERVES, AND 95 PERCENT OF CURRENT SURPLUS PRODUCTION CAPACITY. NON-OPEC PRODUCERS ARE ALREADY PRODUCING AT CLOSE TO THEIR CAPACITY, AND PREVAILING PRICE LEVELS ARE ENCOURAGING THEM TO DECREASE THEIR PRODUCTION CAPACITY RATHER THAN TO EXPAND IT.

HIGHER U. S. IMPORT DEPENDENCE, OF COURSE, LEAVES THE NATION VULNERABLE TO SUPPLY DISRUPTIONS, A CONDITION

SOME OF WHICH CONSEQUENCES WE EXPERIENCED IN THE 1970'S. A SIGNIFICANT DISRUPTION -- FOR EXAMPLE, THE LOSS OF 10 MILLION BARRELS PER DAY FOR ONE YEAR IN THE 1990'S -- COULD HAVE AN IMPACT ON THE GNP TWICE AS GREAT AS THE WORST RECESSION WE HAVE EXPERIENCED SINCE WORLD WAR II.

EVEN IGNORING SUCH DRAMATIC POSSIBILITIES, THE GREATER THE DEGREE OF U.S. IMPORT DEPENDENCE, THE GREATER THE DEMAND FOR OPEC OIL, AND CONSEQUENTLY THE HIGHER THE PREVAILING PRICE AND THE GREATER THE DEGREE OF SENSITIVITY TO RELATIVELY SMALL CHANGES IN DEMAND. THUS, A 1 MILLION BARREL PER DAY INCREASE IN DEMAND OCCURRING WHEN THE DEGREE OF IMPORT DEPENDENCE IS HIGHER WILL INDUCE A DISPROPORTIONATELY GREATER PRICE INCREASE THAN A 1 MILLION BARREL PER DAY DEMAND INCREASE OCCURRING AT A LOWER LEVEL OF IMPORT DEPENDENCE -- AND THAT GREATER PRICE INCREASE WILL APPLY TO EVERY BARREL IMPORTED, MAKING THE DISPROPORTIONATE IMPACT ON THE TOTAL COST EVEN GREATER.

HIGHER IMPORT DEPENDENCE, THEREFORE, HAS SIGNIFICANT NEGATIVE IMPACT ON OUR DOMESTIC ECONOMY. OPEC'S COHESION AND ABILITY ONCE AGAIN TO ESTABLISH CONTROL OVER WORLD OIL PRICES WOULD HAVE A DISTURBING EFFECT ON THE WHOLE WORLD ECONOMY AND, OF COURSE, THE POSSIBILITY OF A MAJOR PRICE SHOCK IN RESPONSE TO SOME UNFORESEEN POLITICAL OR

MILITARY DEVELOPMENT WOULD BE MAGNIFIED.

OTHER COSTS RESULTING FROM A HIGH DEGREE OF OIL IMPORT DEPENDENCE INCLUDE THE NEED TO FACTOR ENERGY SECURITY REQUIREMENTS INTO FOREIGN POLICY FORMULATION, THE DEVELOPMENT OF FRICTION BETWEEN THE U. S. AND ITS STILL MORE OIL-DEPENDENT ALLIES, THE STRENGTHENING OF SOVIET ABILITY TO TAKE ADVANTAGE OF ITS OIL FOR ECONOMIC AND STRATEGIC PURPOSES, AND THE INCREASE IN THE IMPORTANCE OF SECURING OIL SUPPLY LINES AS A CENTRAL FEATURE OF U. S. STRATEGIC PLANNING.

UNFORTUNATELY, OUR NATIONAL POLICYMAKERS -- BOTH IN THE LEGISLATIVE AND THE EXECUTIVE BRANCHES -- HAVE TO DATE SHOWED LITTLE AWARENESS OF THE MAGNITUDE AND SIGNIFICANCE OF THE INDUSTRY'S PROBLEMS. (SENATOR JOHNSTON IS A NOTABLE EXCEPTION TO THIS, AS IS SENATOR BREAUX). IN 1986, THE INDUSTRY, WHOSE TROUBLES WERE BOTH OBVIOUS AND WELL PUBLICIZED, WAS ASSAILED BY GOVERNMENT IN A NUMBER OF IMPORTANT AREAS. NEW INVESTMENT WAS DISCOURAGED VIA A TAX BILL THAT DISCRIMINATED MARKEDLY AGAINST CAPITAL INTENSIVE INDUSTRIES, SIGNIFICANT NEW REGULATORY BURDENS WERE IMPOSED AND LIMITATION OF ACCESS TO THE MOST PROMISING PUBLIC LANDS WAS CONTINUED OR EVEN EXTENDED.

THERE ARE INDEED STEPS THAT CAN BE TAKEN TO ALLOW

THE INDUSTRY TO ACT IN WAYS THAT WOULD MITIGATE THE FUTURE ENERGY PROBLEM I HAVE DISCUSSED. BUT THEY MUST BE TAKEN SOON, BECAUSE THE LEAD TIMES ARE LONG AND THE INDUSTRY'S ABILITY TO TAKE THEM IS RAPIDLY ERODING. GIVEN THE RIGHT SIGNALS, THE MARKET CAN ENCOURAGE THE CORRECT REACTIONS ON THE PART OF THE OIL INDUSTRY. BUT UNDER THE CONDITIONS PREVAILING TODAY, THE GOVERNMENT IS SENDING THE WRONG SIGNALS TO THE MARKET, AND IT IS UNREALISTIC TO EXPECT THE INDUSTRY TO BE PREPARED TO RESPOND SMOOTHLY TO SUDDEN SHOCKS OCCURRING IN A FEW YEARS THAT MAY TRANSFORM THE SUPPLY SITUATION OVERNIGHT.

THE MOST IMPORTANT POLICY APPROACHES THAT SHOULD BE TAKEN SO THAT THE RIGHT SIGNALS ARE GIVEN IN TIME INCLUDE:

o IMPOSITION OF OIL IMPORT FEE.

AN IMPORT FEE, LARGE ENOUGH TO MEANINGFULLY ENHANCE U.S. ENERGY SECURITY, SHOULD BE IMMEDIATELY IMPOSED ON ALL IMPORTED CRUDE OIL AND REFINED PRODUCTS. THAT FEE COULD FOLLOW SEVERAL FORMS, THE TWO MOST LOGICAL SEEM TO BE A FIXED FEE OR A VARIABLE FEE TO REACH A FLOOR PRICE FOR DOMESTIC OIL. THAT FEE SHOULD COVER BOTH THE "SOCIAL" AS WELL AS "SECURITY" COMPONENTS OF THE COSTS OF IMPORTS AND SHOULD BE AT LEAST $10.00 PER BARREL AS A FIXED FEE, SINCE IT WAS LEGISLATED IN 1979, THIS MISNAMED TAX HAS HAD A DISCOURAGING EFFECT ON DOMESTIC OIL PRODUCTION BY INCREASING COSTS TO PRODUCERS. SINCE EARLY 1986, NO DOMESTIC PRODUCERS HAVE BEEN PAYING THE TAX, BECAUSE OF PREVAILING PRICES, BUT THE KNOWLEDGE THAT IT WILL ONCE AGAIN COME INTO EFFECT WHEN PRICES EXCEED ABOUT $19 PER BARREL STILL SERVES AS A DISINCENTIVE TO NEW INVESTMENT IN OIL AND GAS PRODUCTION. THE TAX IS DUE TO BEGIN PHASING OUT IN 1991 IN ANY EVENT, AND HASTENING ITS OVERDUE DEMISE IS AN ACTION WHICH WOULD HAVE NO ADVERSE BUDGETARY EFFECT AT THIS TIME AND WOULD SHOW THAT THE NATION DOES NOT INTEND TO REPEAT THE MISTAKES OF PAST ERAS.

- DECONTROL OF WELLHEAD NATURAL GAS PRICES:

SINCE 1954, PRICE CONTROLS HAVE DISCOURAGED THE EFFICIENT USE OF ONE OF THE NATION'S PREMIER ENERGY FUELS AND EVEN TODAY THEY CONTINUE TO BE APPLIED TO A SIGNIFICANT FRACTION OF SUPPLIES. COMPLETING PRICE DECONTROL WOULD BE ANOTHER SIGN OF SERIOUS NATIONAL INTEREST IN A RATIONAL AND EFFECTIVE ENERGY POLICY.

- ACCESS TO PROMISING FEDERAL LANDS:

CURRENTLY, MANY OF THE MOST PROMISING PROSPECTS FOR

NEW OIL AND GAS PRODUCTION ON GOVERNMENT OWNED LANDS, BOTH ON AND OFFSHORE, ARE BEING WITHHELD FROM LEASING, OR EVEN FROM EXPLORATORY DRILLING. UNREALISTIC FEARS OF ENVIRONMENTAL DAMAGE ARE FREQUENTLY CITED BY OPPONENTS OF EXPLORATION. THE INDUSTRY'S RECORD PROVES THEM WRONG.

o CONTINUED FILL OF THE STRATEGIC PETROLEUM RESERVE:

THE SPR, WHICH CURRENTLY HOLDS 510 MILLION BARRELS, SHOULD CONTINUE TO BE FILLED UNTIL IT HOLDS AT LEAST A 90-DAY SUPPLY OF IMPORTS.

o ENVIRONMENTAL AND TAX POLICIES:

A VARIETY OF NEW ENVIRONMENTAL TAXES AND REGULATIONS ARE BEING PROPOSED WHICH WOULD IMPOSE A STAGGERING NEW BURDEN ON THE OIL INDUSTRY. THEY INVOLVE SUCH AREAS AS PRODUCTION WASTES, REFINING WASTES AND GASOLINE VAPORS. IT IS ONLY REASONABLE THAT BEFORE NEW COSTS ARE IMPOSED, IT SHOULD BE CLEARLY DEMONSTRATED THAT THE BENEFITS DERIVED WILL BE COMMENSURATE. THAT IS ALL TOO OFTEN NOT THE CASE. AND, FINALLY, THE PETROLEUM INDUSTRY HAS IN RECENT YEARS BEEN THE MOST HIGHLY TAXED OF ALL MAJOR INDUSTRIES. NOW IS NOT THE TIME TO ADD TO THIS BURDEN IN AN ATTEMPT TO SOLVE SUCH MAJOR NATIONAL PROBLEMS AS THE BUDGET DEFICIT.

The CHAIRMAN. I have just one quick question, and that is this: At today's prices how many real wildcats can you drill?

By "real wildcats" I don't mean a development well. I don't mean a well that you have to drill in order to save your lease. But an authentic wildcat well, how many of those can you drill at today's prices?

Mr. WILLIAMSON. At today's price being $18?

With our company, let's assume that in a normal year we would have a hundred wildcat prospects in the budget, maybe three, four, five. Very rarely would we find one.

The CHAIRMAN. Mr. Moffett.

Mr. MOFFETT. The best way, again, is that we were drilling over a hundred wells—as a matter of fact, at some points we had sixty or seventy rigs running a day. Our rig count now is down to five.

And I'll give you a good statistic. I was talking to the vice-president of exploration of one of our major oil companies that was recently the result of a combination of two of our major companies, and they had one wildcat drilling well drilling in the U.S. One.

The CHAIRMAN. Gentlemen, I want to thank you very much. Before I call on Senator Domenici, I just want to say one thing, and that is: The independent driller and contractor in this country is united, I believe, in Louisiana, Texas, Oklahoma and elsewhere, behind an oil import fee. Many of the major companies are, as well.

One thing we need to realize about major companies is that some of them don't support it because they have extensive refining and marketing ability, and whoever produces the oil, whether we produce it here or whether they produce it in OPEC, is going to sell it and they're going to make theirs.

We are hearing today from the people who drill oil domestically and produce it for America.

And I want to thank you for your support of that oil import fee. Senator Domenici. [Applause.]

Senator DOMENICI. Mr. Chairman, I have no questions.

I, too, want to commend the witnesses for the clarity of their remarks, and the persuasiveness of their remarks.

I do want to say now for myself, to you, Mr. Chairman, just because we may run into some time problems, I must leave your fair state sometime around 1:30 this afternoon, so if I disappear it's not because I'm not genuinely interested, but I'm on a schedule in my own home state. So I want to tell you all that in advance. You've been very good to me.

I'll conclude by saying: I believe the case is just conclusive that we must do something. And I think if we can keep the momentum going we have a chance. The longer we wait, however, the more ineffective it's going to be, and the worse off this country is going to be.

So, I appreciate being here with you, and being with these wonderful people.

The CHAIRMAN. Thank you very much.

Senator Breaux.

Senator BREAUX. I really have no questions. I think one point you made was important. We talked about the $4 a barrel import fee. I think Pete Domenici and Bennett, and all of us on that legislation are going to have to look at making it a variable fee, if the

OPEC decides to drop the price down to, say, $10 a barrel, again a $4 import fee would still be only $14. We have to take it to the extreme and make sure that we're protected.

Thank you both for your support.

The CHAIRMAN. Thank you very much, gentlemen.

Next we want to take one witness out of order here. We are very pleased to have the Governor of our State, who has asked to testify, he has been a long-time leader not only in our state but across the nation in oil and gas matters.

I'm happy to introduce Governor Edwin Edwards. [Applause.]

STATEMENT OF HON. EDWIN EDWARDS, GOVERNOR, STATE OF LOUISIANA

Governor EDWARDS. Thank you, Mr. Chairman, members of the Committee, and especially you Senator.

I was in New Mexico about ten days ago to address the New Mexico legislature. I had to go out of state to find a legislature that would listen to me [laughter] I was very pleased to be there.

Those of our friends in the audience from this area may not know it, but since I hunt in northern New Mexico I think I will take this opportunity to tell them something that you can verify. That Lafayette is very much like Farmington in New Mexico. You have the same signs of depression in the oil and gas industry that we have seen here in Lafayette. And I would want them to know that there are people in many other cities and towns around the nation that share the concerns that they have.

I have prepared a formal presentation for the Committee which, in the interest of time, I will simply ask that you file in the record, and I will synthesize it for the benefit of the audience.

I want to make a couple of observations. One, we now have and have had for some time the highest unemployment rate in the nation. And while many reasons are given for that, I can state as a matter of fact that if we had back the jobs that we have lost in the oil and gas industry as a result of the decline of the industry our unemployment rate would be equal to or less than the national average.

And for those who tried to find some political reason as to why we have unemployment so high in this state, I would suggest that in Texas, and in New Mexico, and in Arizona, and in Oklahoma, and Alaska, Wyoming, and all the states that have historically relied upon the production of oil and gas for its economic betterment, all are suffering comparative to the way we are, and in some instances even worse on a per capita basis.

Every time the price of oil goes down a dollar we lose 3,000 jobs in the industry in Louisiana. And every time a person in the industry loses his job two others in related industries lose their jobs. Hence, it is easy to see how in a state with 250,000 unemployed, that number of unemployed people contribute significantly to our unemployment rate.

I want to emphasize that it's fitting that you be in Louisiana today, because we are the second largest gas-producing state in the nation. The third largest crude oil-producing state. And we have the third largest refining capacity of any state in the nation. And this is a real, and critical, and serious problem for Louisiana. But it is an on-going and serious problem for our nation as a matter of security and independence from the whim and caprice of OPEC nations.

When I first suggested an oil import fee several years ago there were many in the industry who did not agree with that position. I think many, including the previous speaker, are now coming around to it as one thing that we can do to help the situation.

I have some concerns, however, Senator Breaux, about the variable fee, because I'm concerned that it would invite the OPEC nations to peg the price of oil at the level that we would relate it to. In other words, if we said it would be variable to maintain a floor of $25 a barrel they would probably just fix the price at $25 a barrel. We would get no import tax benefits, but we would pay the same price for the oil, and they would get the benefits of it.

Personally, I would prefer to see a flat tax of, say $10, which would maintain it at that level. That would generate about $53 million a day for the national Treasury, $20 billion a year which is about ten percent of the annual deficit. But I do suggest that in the long-range interest of our country a considerable portion of that money should be used for research and development, solar energy, and wind power, and exotic forms of energy because, as has been testified, the glut that we think we see in the world today is not going to last forever. And many of us, if we live our biological lives, and some of us in our political lives, are going to deal again with severe shortages in gas and oil as a commodity needed for fueling the economy of this country.

Let me close, again by saying thank you for coming. We are very pleased to have you in Louisiana. We as an industry have done our part, and we as a state have allowed our natural resources to be used and tapped for the benefit of this country for 50 years. Some 75 percent of the total energy components produced in Louisiana are shipped out of state for the benefit of other people.

We think we've done our part in the times when we were producing oil and gas and the rest of the nation was getting benefit of low oil and gas prices. We feel it is fair of us now to say to the rest of the nation "Now we have problems, and it is time for you to come to our aid."

The CHAIRMAN. Thank you very much, Governor. [Applause.]

[The prepared statement of Governor Edwards follows:]

ENERGY SUPPLY IN PERIL

Comments Submitted to Senator J. Bennett Johnston
for February 9, 1987 Senate Energy Committee Hearing

Submitted by
Governor Edwin Edwards
State of Louisiana

ENERGY SUPPLY IN PERIL

Summary

A very real danger of low oil prices is that as the price drops, combined finding and lifting costs begin to exceed the value oil brings on world markets. At each drop in price, increasingly more potential oil fields become too expensive to explore, and increasingly more existing fields become uneconomical to develop, to produce, or to establish tertiary recovery projects. Fewer new resreves are added; once marginal reserves become uneconomical and are abandoned; domestic production declines; and dependence on foreign imports increases. Likewise, as the price of oil drops, it depresses the price of and displaces the use of alternative energy (e.g., coal, lignite, synthetic fuels, biomas, solar, etc.) use, development, production, and investments.

The end result of low oil prices is increased short term dependence on temporarily cheap foreign energy sources and an increased outflow of U.S. dollars. In the long term, when oil returns to a short supply situation, America's deteriorated ability to meet its own energy needs will drive up long term energy costs and strategic vulnerability.

We can already see the effects of low oil prices. Total petroleum consumption in the U.S. rose to 16.1 million barrels per day in 1986, an increase of nearly 400,000 barrels per day over 1985 levels. This was the highest consumption level since 1980. Crude oil and natural gas liquids production in the U.S. declined by 300,000 barrels per day in 1986 to a level of 10.3 million barrels per day.

Low oil prices in 1986 led to increased demand, lower domestic production, and stockbuilding which stimulated the growth of imports. Net U.S. petroelum imports in 1986 increased by more than 1 million barrels per day over the 1985 rate to 5.3 million barrels per day. Thus, imports increased their share of net U.S. petroleum supply to 33% in 1986 from 27% in 1985. Nearly all of this increase was from OPEC countries, thereby increasing OPEC's share of imports from 36% to 46%.

The Interdependence of Louisiana and Petroleum

Louisiana is the

2nd largest gas producing state (5.1 Trillion Cu. Ft. in 1985, which includes 3.2 Trillion Cu. Ft. from the federal OCS)

3rd largest crude oil producing state (503 million barrels in 1985, which includes 320 million barrels from the federal OCS)

3rd largest refining state in the U.S. (19 operating refineries with 2.2 million barrels per calendar day operating capacity)

The Louisiana OCS territory has produced

93% of the crude oil and condensate and
92% of the natural gas
ever produced from all U.S. OCS territory

For every new job lost from lost sales in oil and gas production in Louisiana, 2 additional jobs are lost elsewhere in the state. For every job lost in the petroleum refining industry via lower sales, almost 6 jobs are lost elsewhere in the Louisiana economy.

In 1985, direct employment in Louisiana in oil and gas extraction, petrochemicals, petroleum refining, and oil field machinery totaled approximately 6.8% (approximately 108,000 jobs) of nonagricultural employment, compared to the U.S. average of only 0.9%.

In 1985 direct income to the State Treasury from oil and gas severance taxes, royalty income and bonuses totaled $1.12 billion, or approximately 16% of the total State budget (including federal funds).

At constant production, the State Treasury loses $29 millon of direct revenue from oil severance taxes and royalty payments for every $1/barrel drop in oil prices. This figure rises to $45 to $48 million per dollar drop when indirect revenue impacts are included (e.g., income tax, sales tax, etc.)

Unfortunately, production does not remain constant as price plunges the extent it has over the last year. For each 10% decline in oil production, approximately $59 million in direct income from severance taxes and royalties and another $36 million in indirect income is lost.

For every $1/barrel decline in oil prices, 3000 Louisiana workers lose their jobs.

Louisiana's unemployment rate has reached the highest in the nation-approximately 13%.

Finding Costs, Lifting Costs, and Profit Margins

Comparing the American petroleum industry's competitive ability to that of Saudi Arabia or other Arab countries' abilities to ecoonomically explore for and produce oil would be like comparing apples to watermelons; geology and economics are very different. To sum it up very simply, Middle East oil production may be contrasted as having far higher volumetric production, from far fewer wells, from far larger reservoirs.

In a study prepared for Texas Senator Lloyd Bensten, it was reported that OPEC countries can afford to produce and sell oil to foreigners at $6 barrel! The report predicts that should oil prices fall that far, U.S. drillers will cease looking for oil, and U.S. dependency on foreign crude would increase from the current 33 percent to 80 percent. Of course oil prices are unlikely to drop as low as $6 per barrel, but much of the production in Louisiana and the U.S. is uneconomical at even $21per barrel. The implications of this fact are both obvious and ominous.

To get a quantative feel for the implications of low oil prices on resource development, one need only look at average finding costs and lifting costs for the U.S. petroleum industry. Finding costs include the engineering and geology studies, exploration wells, dry holes, etc., necessary to find oil and gas and bring reservoirs into production. Lifting costs include the equipment and operations necessary to get oil and gas out of the ground and into the necessary transportation system and include secondary and tertiary recovery costs, but do not include other operations such as refining and marketing. Simply stated, for oil and gas exploration and production to take place in a free market economy, a company must be able to receive sufficient revenue from the sale of oil and gas to cover finding and lifting costs, to pay taxes and still make a reasonable profit. The U.S. is the highest cost major petroleum producer in the world. Present oil prices are simply insufficient to provide the economics necessary for a healthy petroleum exploration and development industry in this country.

Impact of Crude Price on Reserves

Developed Oil Fields

There is continuing debate on the precise effects of prices on proved reserves, but thre is no question that lower prices reduce the amount of economically recoverable reserves. In developed crude oil reservoirs, price affects the economic limit or minimum production rate required to meet the operating costs. For a given reservoir, a crude price rise beyond a minimum threshold will convert a noneconomic reservoir to an ecoonomic one. Likewise, for any given reservoir, a price drop below a certain minimum will make a once economic reservoir become uneconomical to produce. Additionally, sufficient oil prices are required to justify the high costs of improved recovery techniques which can significantly increase the ultimate recovery from existing reservoirs.

Successful Exploration Efforts

Price has a major impact on whether a new discovery is produced or abandoned. A decision to install a platform as the result of an offshore discovery, and a decision to set casing in a new onshore discovery, are examples of economic decisions based on sufficient prices necessary to justify required capital and operating costs. If the price of oil justifies the investment, the new discovery will add to the proved reserves total; if not, the project will be abandoned with the new discovery making no contribution to proved reserves.

The sensitivity of reserve development to oil prices was illustrated last year in the second draft of the U.S. Department of Interior's five year leasing plan, which stated that falling oil prices have already reduced by about 20 percent the amount of oil worth recovering from U.S. offshore areas.

The Interior Department's report estimates recoverable offshore oil at 11.8 billion barrels of oil, or the equivalent in natural gas, if the current price were $20 per barrel, and 14.6 billion barrels if the current price were $31 per barrel. Economic benefits of developing the oil and gas fall from $92 billion dollars to 40 billion dollars (1987 dollars) as the price of oil falls from 31 to 20 dollars per barrel. In releasing the report, Interior Secretary Hodel emphasized that it is not just the low current oil prices that impact leasing for future offshore development; what is also very important is the future price oil will bring over the lifetime of the development of a leased tract.

The proceding analysis by the Interior Department further demonstrates the need to shore up domestic oil prices over the next four to six years or whatever period it takes for oil prices to return to the 28 to 30 dollar price range. If domestic crude prices do not maintain a reasonable level of profitability, the viability of the domestic oil and gas industry will be seriously imperiled, and along with it the nation's long term economic and energy security.

Current Driling Trends

The Energy Information Agency (EIA) reports that a higher proportin of U.S. drilling, in recent years, has been development or in-fill drilling as opposed to being wildcat drilling. (See appendix for graphs.)

If one looks back at drilling permits from the Office of Conservation since the price of crude bagan to deteriorate in 1982, one can observe the following for Louisiana:

Wildcat permits have dropped off steadily every year except 1984 when they rose slightly. (645 in 1983; 703 in 1984).

In 1984 there was a substantial increase in total drilling in Louisiana.

The sharpest percentage drop in wildcatting was from 1985 to 1986 (50% drop) during the period.

The sharpest percentage drop in total drilling was from 1985 to 1986 (58% drop) during the period.

The ratio of wildcat wells to total wells rose in 1985 and again in 1986, but this was because total drilling was dropping faster than wildcatting in those two years.

From 1981 through 1986 total drilling in Louisiana dropped by 64% while wildcatting dropped by 73% as measured by Office of Conservation drilling permits.

Looking at 1986 permits in detail; the total number of permits bottomed out in June and has shown a generally rising trend since that point (112 permits in June, 212 permits in December). Wildcat permits may have also bottomed out in September, but their rise has been much more erratic than the trend of total permits.

Active rigs appear to have stabilized in Louisiana but at a low level; the active rigs number is in the 70's.

Current Industry Topics

Oil Prices

The spot price and average prices of Oil are increasing.

DNR "informal - Best Guess" price projections for the calendar year 1987 indicate an average oil price of $18, with excursions up to $20 and down to $15 possible.

Drilling

There is a slight increase in drilling activity. The December Oil & Gas Journal showed a 10 rig increase in Louisiana while the total the U.S. count continued to decline.

Texas, Oklahoma and Mississippi have been discussing drilling incentives similar to those in STEP and LEAP, but to date, no significant measures have been put into effect.

OPEC

OPEC has finally agreed on an $18/bbl reference price.

Iran is again on the offensive against Iraq. Persian Gulf oil transport is currently hazardous and expensive. Military analysts suggest the resolution of the Iran-Iraq conflict is still not in sight.

Miscellaneous

The new tax law leaves the small producer relatively untouched. Also real estate is now a relatively unattractive investment especially compared to oil. New IRS rules and definitions for stripper wells may cause tax increases and the shut-in of additional U.S. production capacity.

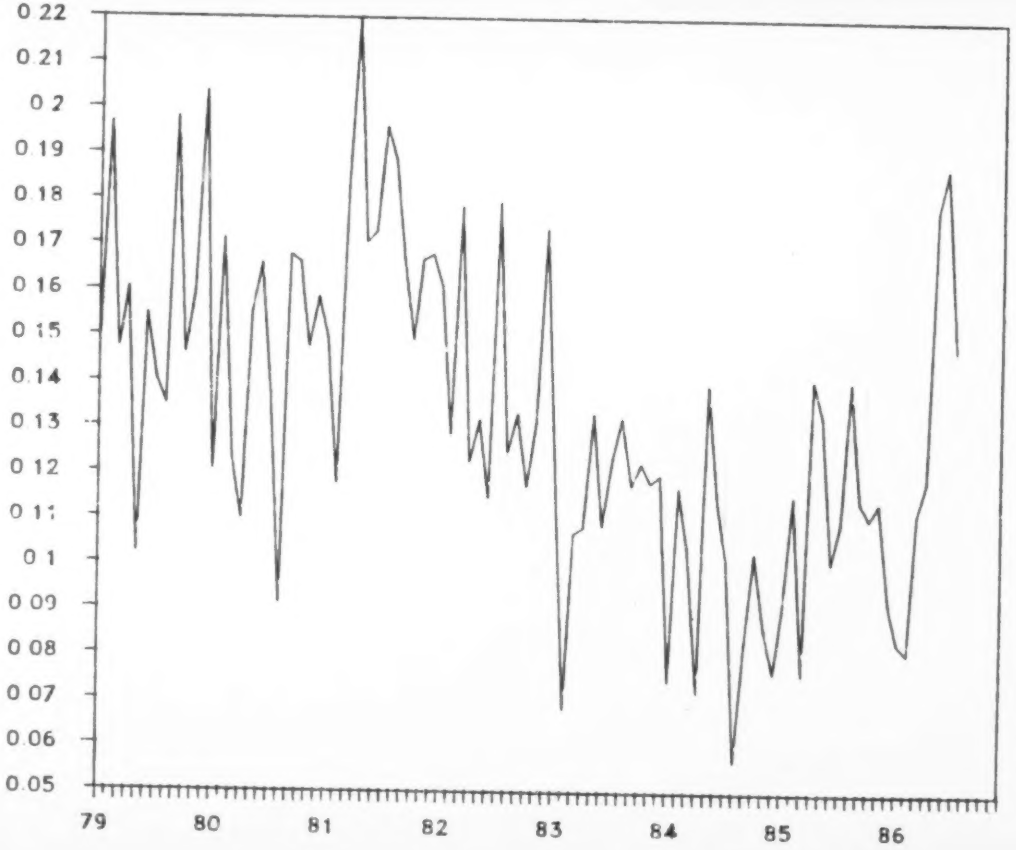
Standard Oil will not try to replace Alaskan oil reserves.

Projected domestic oil production may decline by 17%, from 3 billion to 2.5 billion barrels per year, by the year 2000. This comes from the Oil and Gas Journal citing a Congressional Research Service study.

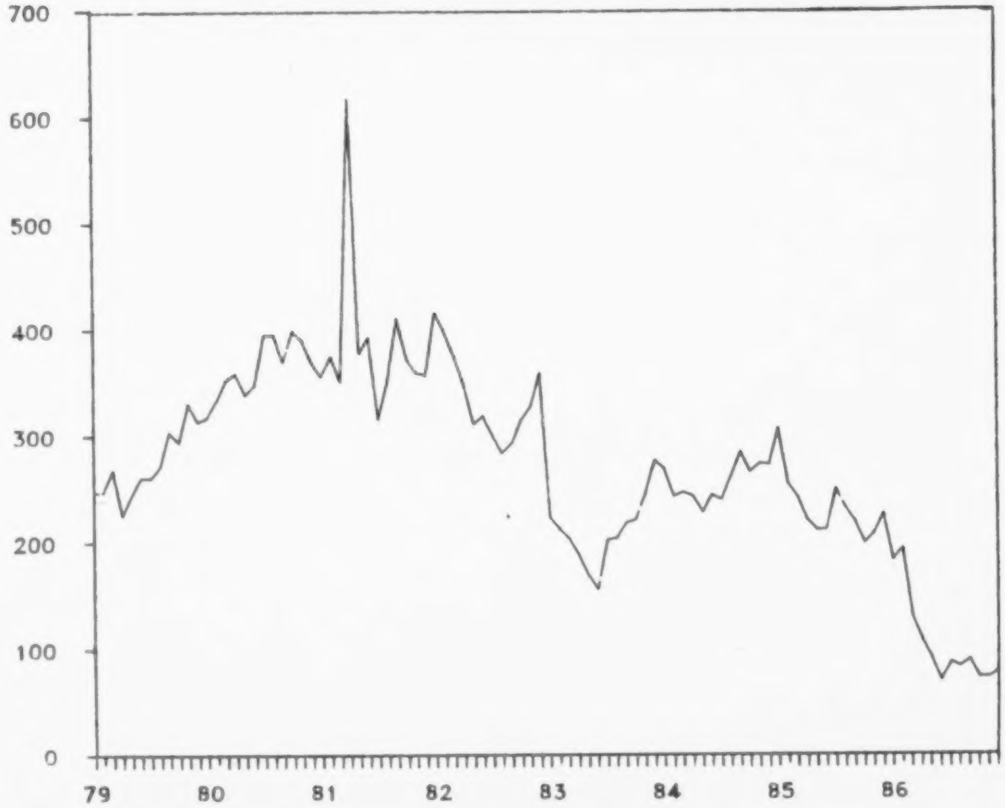
I commend this Committee's action and the other activities you have undertaken to focus attention in Washington on the plight the oil and gas industry is facing and the fact that the depression in the "Oil Patch" is not only bad for the economies of the producing states, but is detrimental to this nation's best interests.

APPENDIX

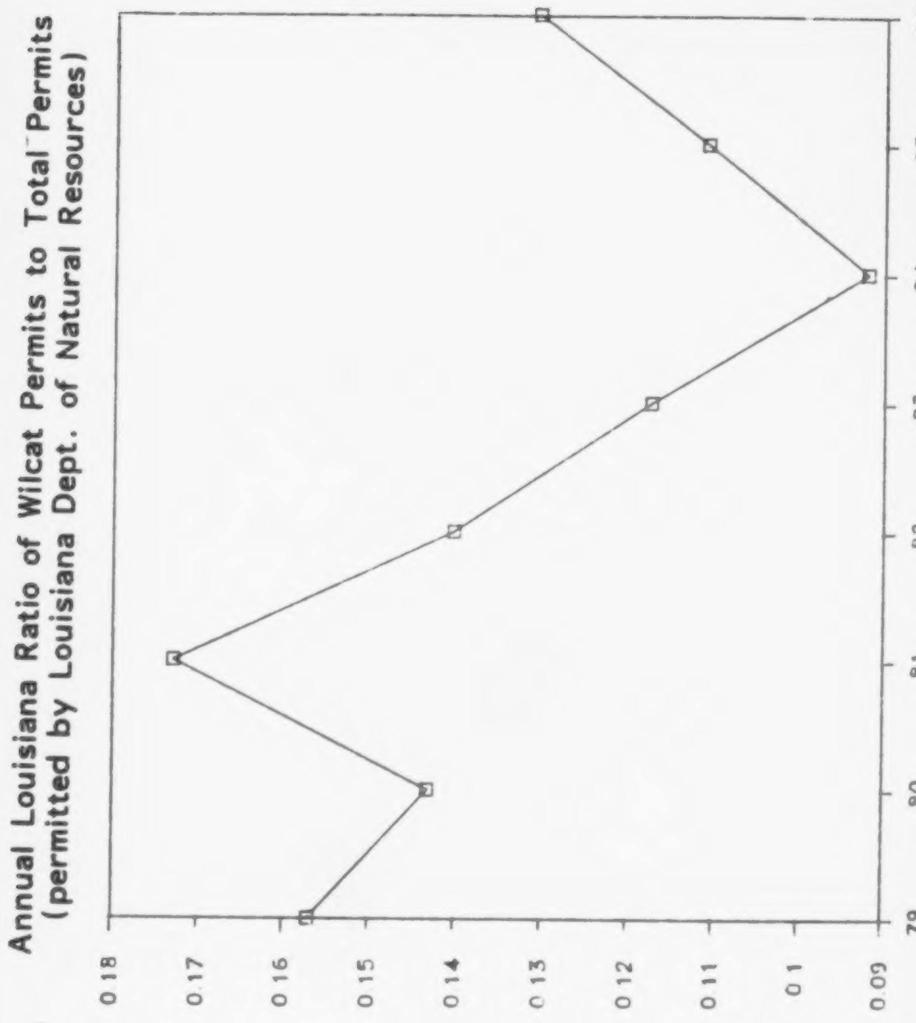
Monthly Louisiana Ratio of Wildcat Permits to Total Permits
(permitted by Louisiana Dept. of Natural Resources)



Monthly Average of Active Rigs in Louisiana
(permitted by Louisiana Dept. of Natural Resources)



(from Permit Section)



Annual Louisiana Ratio of Wilcat Permits to Total Permits
(permitted by Louisiana Dept. of Natural Resources)

Mr. CHAIRMAN. Governor, would you tell us how much money from the state budget we have lost on account of the oil price drop during the last couple of years?

Governor EDWARDS. We have gone from about 45 percent of our net revenue coming from the oil and gas industry to something like 22 percent.

We have had to cut the state's budget $860 million in the last two years as a result in the decline of revenue. That, of course, is just part of the problem.

The more serious side of it is the loss of jobs, Senator, which I know you understand and are concerned about. The loss of seventy-five thousand plus jobs the last two years has also had a ripple effect in the loss of income taxes and sales taxes, because people without jobs cannot buy goods and services; therefore, do not pay sales taxes. And people without jobs pay no income taxes because they have no incomes.

There is a further effect that is not known to many people, and that is the employers of Louisiana. The people represented by the Chamber of Commerce who ought to take a more active interest in this unemployment problem. We are paying in Louisiana, not the unemployed workers, not the employed workers, not the food stamp recipients, not the politicians, not the school boards, and police jurors, but the employers, the men and women who own the professions, the lawyers, the CPA's, the doctors, the small and large business men and women, are paying $1 million every day in unemployment compensation taxes because of the high unemployment rate we have. $365 million a year, and we owe $700 million to the Federal Government, paying $70 million a year in interest.

If we do not turn around the unemployment rate the employers will never extricate themselves from this growing debt that they are accumulating with the national government. And I think that those who are employers and who are paying this unconscionable bill is unemployment compensation taxes ought to be more concerned about the fact that we have high unemployment, because it is not only affecting their sales and services, it's affecting what they're paying everyday into an unemployment compensation fund.

The CHAIRMAN. Thank you.

Senator Domenici.

Senator DOMENICI. I have no questions.

The CHAIRMAN. Senator Breaux?

Senator BREAUX. Thank you, Mr. Chairman, and you, Governor, for your testimony.

I was wondering, we had said a little earlier that the President has authority, Congress gave him the authority to act on behalf of national security and place whatever import fee he thinks is necessary in the interest of national security.

We're going back to Washington sometime this week. Do you have any message we can deliver to the President on your behalf as representative of this state?

Governor EDWARDS. In this audience? [Laughter.]

Well, if he has the authority, and I understand he does, then I would ask him to do a tough political thing, because I recognize that the political power blocks of the Midwest and the East would take umbrage to the action. But he has not been unwilling to take tough political decisions in the past. And I would suggest that he try to do what he can to educate the American public on the jeopardy that we are placing our nation in while we enjoy the short-term benefits of low-priced oil. It has increased the consumption of oil, and it has increased our dependence on foreign crude. And we are setting the stage, as has been testified, to some very serious consequences in the future.

That's tough to sell. Look, I've been in the Vanguard trying to convince people of their long-range interest, and that's tough to do. But this President needs to do that if he has a concern for the future of America, and not to the short-range political consequences.

And he ought to immediately use whatever Executive power he has to put some kind of import fee on imported oil.

We need to look at the amount of refined products that are coming into this country every year.

And I think as President of the U.S., with his great capacity to communicate, that he should take it upon himself as a very important mission that he convince America as to why we need to do this, so that it will then become politically expedient and popular to do so.

And that's a tough thing to do. But I would suggest that if he wants to serve the long-range interest of our country, and be responsible for extricating us from what I see as some serious consequences by the year 2000 that he needs to do that.

Senator **Breaux**. Thank you.

The **Chairman**. Governor, I very much agree with you. And I would like to think that the President would exercise the power which he has.

We've called on him over a long period of time to do it, and I think he's not going to exercise that power. But if he would at least get out of the way of the Congress then we'll do it, with the support of these good people here.

I think the message we want to give is to ask the Congress to do it and we'll do the job of enacting an oil import fee.

Governor, thank you very much for excellent testimony.

Governor **Edwards**. Well, let me say to all of you how pleased we are to have you in Congress representing us, who are knowledgeable in this area. And we feel it's something we need to work together on.

And I'm very proud and pleased that you have chosen Lafayette for this hearing. Someone mentioned that, well, we're probably preaching to the choir. That may be so, but it'll have a ripple effect, and sooner or later the rest of the nation will get the message.

But, as I said before, the President could be very helpful in trying to point out why we would need to take these steps, which short range appear to be unpopular, but in the long run serve the American interests.

The **Chairman**. Thank you very much.

I was going to wait until the end of the program for the piece de resistance, and that is our two Congressmen, but I don't want them to get squeezed out by the clock; so I would like at this time to recognize the Chairman of the House Subcommittee on the Outer Continental Shelf, an area that is of vital interest to Louisiana. He is a real expert on oil and gas, and a great Congressman from Louisiana, Billy Tauzin.

STATEMENT OF HON. W. J. (BILLY) TAUZIN, A U.S. REPRESENTATIVE FROM THE STATE OF LOUISIANA

Mr. TAUZIN. Mr. Chairman, before making a statement I'd like to make one point with reference to the question of whether the oil import fee ought to be a variable or fixed fee, because it has come up for discussion just a minute ago.

The one negative to an oil import fee is the notion that it creates two costs of energy in the world. One cost of energy out there in the rest of the world, and one cost of energy in America.

The concern that some have expressed about placing an oil import fee on product here in America is that it will drive the costs of energy up for refineries and producers in American, and create an advantage for foreign refiners and producers who'll have a lower cost.

So that while I think the Governor is correct that a variable rate fee would probably encourage OPEC to simply raise the price of oil up to the peg number. But the desirable effect of that would be a common price of energy across the world, both in America and outside America. And the advantage would be that there would be no incentive to move refining both of oil and gas products and chemical products further away from American shores.

And, in fact, we would hope perhaps a flood of refined products coming.

Mr. Chairman, Mr. Domenici, and Mr. Breaux, let me also congratulate you for coming to Louisiana. We on the House Energy Committee will be conducting similar hearings for the same purpose. The purpose is to alert America to the danger.

You know, all of us can tolerate ignorance, as awful as ignorance is, but most of us cannot tolerate stupidity. After all, ignorance is best, implies a lack of knowledge or a failure to obtain facts, but stupidity is much worse. Stupidity implies that you have the facts but you act contrary to them. You act as though the truth doesn't matter, or that in fact the facts really don't count.

Now it isn't that we don't know that oil today is being priced by a foreign cartel. It isn't that we don't know that American free-enterprise companies are being asked to compete not against other companies around the world but against governments meeting in that cartel, who are fixing prices and fixing supply. It isn't enough we don't know it, yet the Administration still talks about free trade, and still talks about fair trade.

It isn't that we don't know how bad the men and women of the oil and gas industry are hurt today. Each of them as American as apple pie lost their jobs, their livelihood, and their families in fact are breaking up, but yet you hear an Administration spokesman, Mr. Miller go and be testifying before one of our committees in Congress to a U.S. Congressman from Oklahoma, Glenn English, as follows:

Glenn English said to Mr. Miller, "Someone from your administration was in Oklahoma recently and he said that, well, if you fellows in Oklahoma can't make oil and gas as cheaply as they can in Saudi Arabia, then you ought to go find something else to do."

And Mr. English asked Mr. Miller at that hearing: "Is that the Administration's policy?" Mr. Miller's response was, after a moment of thought, "Yes, I think it is."

And it isn't that we haven't seen the percentage of crude oil imports steadily rising, we haven't heard to ominous reports of the 60 percent dependency by 1990. By the way, that's ten percent more than the worst of the 1970's oil crisis. Yet, the Administration calmly tells another independent oil man from New Orleans, not too long ago, that he wasn't, that someone close to the President said this: He wasn't too sure that America really needed an oil and gas industry after all.

And it isn't that we don't know that the foreign import numbers include an increasing amount of OPEC oil in that calculation. In fact, one of the witnesses reported a 300 percent increase last year alone.

And it isn't that we don't know that Iran, Senator Johnston, and Libya are having an increasing influence in those OPEC meetings. But the Administration seems to calmly accept that circumstance as though they don't even realize there's a war going on in the Persian Gulf.

And it isn't as though we don't know that our capacity to produce oil and gas reserves is eroding as our reserves themselves are declining. Yet, this Administration recommended a halt to the filling of the strategic petroleum reserves; even wanted to sell the Elk's Hill Naval petroleum reserve at a time when the price of oil was at the lowest point. I suppose you conclude from the policy is buy high and sell low. Now, how stupid can you get?

It isn't that we don't know that the variable rating for oil import fees is absolutely essential today. If not to save a terminal oil and gas industry for the security of our country. Yet the Administration in an election year burst of sympathy called for another study. Why study again, if the facts don't mean anything? If the truth doesn't change anybody's mind?

It isn't as if we don't know that the President has, Mr. Breaux, today the legal authority today, tonight as we sit here today to sign with a stroke of his pen a six-month oil import fee into existence.

The Administration continually complains about Congress's inability to decide the issue.

And it isn't as though those in the Administration have been trying to help us, haven't adopted strategies that have been doomed to fail. Let's look at the list.

Came with a Natural Gas Bill several years ago. It was founded on the principle of contract abrogation. Drove the industry up the wall.

Then two years alter another Natural Gas Bill founded on the principle of contract carriage and Federal intervention into the intrastate markets to the point of regulating gathering lines. Drove the industry up the wall again.

And, finally, FERC comes out with some Administrative plans to help us. What do they do? They come out and blocked billing. And drive the industry up the wall again.

And, finally, they come out with a tax measure that indeed eliminated every last vestige of tax incentive to get the oil and gas industry going again.

In short, they've been causing us to waste our good political capital here in the oil and gas community, fighting our very friends.

Gentlemen, it isn't ignorance which prevents us from fashioning good energy policy in America. It isn't ignorance which is preventing us from adopting an oil import policy, which could not only protect the country from oil shortages, but perhaps ease the long lines at the gas stations that came in the 70's, the plant shutdowns, the ruined national economy. I remember it well, twenty-one percent plus interest on the prime; twelve to thirteen percent inflation during those years.

It isn't ignorance that's preventing us from avoiding that. It's simply, I'm afraid, a case of stupidity. It's politics. It's catering of the short-sighted interest of cheap gasoline and fuel oil, and dirt cheap natural gas. It's sheer stupidity.

And the price we're paying for the stupidity here in Louisiana, as painful as it is, I tell you pales in comparison to the awful price the country will soon pay, if we're foolish enough to forget so quickly the lessons of the recent past.

Do you remember how much we were dependent upon foreign oil when the Arab oil embargo hit? It was only 49 percent. We're at 42 percent by some calculations today.

Do you remember how much the shortfall was to America when the Arabs declared their embargo? It wasn't twenty, thirty, forty percent. It was a mere ten to twelve percent. And it drove our county into a tailspin.

Do you remember, indeed, those long lines, and that ruined economy?

Senators, our task today is to awaken a drowsy national memory. To repeat the facts as forcefully as we can so Americans lulled to sleep with cheap foreign oil are awakened. Awakened to the stupidity of continually allowing foreign oil to take the place of our daily requirements here in America.

We can't let the Administration in Washington any more claim ignorance. That, too, would be stupid and unforgivable. It's America at stake here, not just Louisiana, or New Mexico, Oklahoma, Texas, or Arkansas. It's America at stake. And America needs an oil import fee. And we need it soon.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Congressman Tauzin.

Now we want to call on the newest Congressman, but not the lst Congressman. He's one of the best, and he represents this area right here. Congressman Jimmy Hayes.

STATEMENT OF HON. JAMES A. HAYES, A U.S. REPRESENTATIVE FROM THE STATE OF LOUISIANA

Mr. HAYES. Thank you.

I want you to know that of the people on this panel the one who knows me best is Senator John Breaux, and he got up and left immediately before I began speaking. [Laughter.]

I do have a distinction in Congress of not being the newest; I'm referred to in the halls as the one who is not running for Governor. [Laughter and Applause.]

I have run into many wonderful stories about both my immediate predecessor, Congressman John Breaux, and his predecessor Governor Edwin Edwards. In fact, there's a wonderful story that Congressman Jack Brooks tells about a young Edwin Edwards who came in in a special election, when Mr. Thompson was killed.

His first day in Congress, without the benefit of any introduction, led him into having to vote almost immediately with no ability to prepare himself for that vote, except to rely upon the distinguished member of the delegation, F. Edwin Herbert. So he goes over and he says, "Is this a good bill?" Eddy Herbert says, "Yes, it is."

Well, at that time, before the electronic lighting you voted alphabetically. And when it hit Edwards, he voted for it. When it hit Hebert, Eddy Hebert voted against it. [Laughter.]

So Edwin went over and he said, "I asked you if that was a good bill." He said, "That's right, son, you asked me the wrong question."

That perhaps is something that all of us are from time to time guilty of doing. And I remember it because I believe perhaps we've been asking some of the wrong questions and giving some of the wrong answers in discussing energy policy.

What we think and what we feel are not necessarily the same thing. And in this instance I think we need to separate the two. What we think is dramatically illustrated by those witnesses we had today. What we think, what we know, what we reason, is that we are shifting energy dependence to countries that do not have our best interest, or in fact or existence in mind.

What we can prove on bar graphs is that we are losing the ability to produce energy in this country at a calculable rate. That we are further continuing to intensify that loss by greater uses. And that we are taking short-term gains for long-term destruction.

What we think is that if we can commit a huge portion of our budget, $300 billion to military spending, it will be of little good if what we are defending is nothing more than a country that is immediately going to become interdependent upon the rest of the world anyway.

It is unreasonable to believe that we can have a $200 thousand barrel a day loss, and each time the sun sets another thousand added to that, without ultimately paying for that price. Not reliving 1974. Not reliving 1979. But the fact is that the past isn't going to come back to haunt us. This time it will come back and overtake us.

There's nothing I can do to take us back. Nothing any gentleman here, nothing any lady here can do to take us back. What we can do is prepare for tomorrow. And that's where feeling comes in, as opposed to thinking.

The message that we have to take to the rest of the country, and taking advantage of this media here, is that here's what we think, now here's what we feel. And what we feel as we drive past those yard signs that say, "For Sale" with a tricycle overturned next to them. What we feel is getting phone calls in my office from people now in Alabama that used to work in Louisiana, and concerned mothers wondering if we can get in touch with them.

What we feel is the realization that real people with real mortgages, that live in real houses, are forever leaving our state.

What we feel is that our educational system will never be retrenched without the money to put behind education. And the money won't be here as it crosses the Sabine River on a daily basis.

Those are the things that we feel. And our obligation as elected officials, and your obligation as members of the public is to put thinking and feeling together.

You heard from a gentleman this morning that does it as well as anyone I've ever heard. When I was in high school, when I was a kid, I was a big fan of the University of Alabama. Maybe the best Alabama football team I ever saw played in the Bluebonnet Bowl. And as I sat there pulling for them, there was one unbelievably arrogant player, who wasn't even a real All American; he was an academic All American. And every time the ball got snapped, you knew he was there. When it was over 3-3, and they gave him the ball. Well, apparently later Freeport McMoRan realized they'd made a good acquisition, and Jim Bob Moffett did what he did then again today.

Put that blend of his intelligence and thinking behind what he also feels. That's our job, and that's your job.

Believe me, if we do not do that today, tomorrow will belong to those countries who do.

Thank you.

The CHAIRMAN. Thank you very much, Congressman Jimmy Hayes.

Our final panel is composed of four outstanding men; Mr. Carl Bauer, who is Chairman of the Louisiana Federal Savings Bank and past president of the Louisiana Landowners Association of Lafayette, Louisiana. We'll hear first from you, Mr. Bauer.

Let me say to our witnesses I'm sorry we've impinged upon your time. But I think you know we've got to be at the rally in 16 minutes, so if you can govern your time accordingly.

STATEMENT OF CARL W. BAUER, LOUISIANA FEDERAL SAVINGS BANK, LAFAYETTE, LA

Mr. BAUER. Senator, I now know why you asked us to file copies of our statements. Those of us last will be brief, I'm sure.

You have heard an interesting array of witnesses and testimony this morning, and I'm just going to allude to some of the comments that I have in my file statement and attached exhibits.

I think it should be obvious to you now and to Senator Domenici that it's certainly tragic that so many have suffered in our area from these disincentives that have been referred to us this morning to domestic exploration and discovery. But it's going to become far more tragic when this suffering eventually involves this entire nation.

At the moment obviously these problems appear localized to our oil-producing states. And if one is to accept national media reports those politically unaffected are not really particularly concerned at the moment. And while I cannot accept such a calloused and insensitive reaction to our problems, I can certainly understand it.

It has been my unfortunate experience in the past as a former member of the Louisiana State Legislature that in many, many areas of vital governmental concern crisis, real serious crisis has to dictate a resolve to face problems.

We suggest to you here today, I think it's been suggested already and will be again, that we in the oil producing states that the entire U.S. has a very serious energy problem. And I guess you gentlemen from our delegation in the Congress, with the distinguished Senator from New Mexico, are going to have to shock your colleagues into an awareness of the severe national security risk facing this country as a result of the near collapse of our domestic exploration industry, which you've already heard about this morning.

You're going to hear, given a little time and I think not too much time at that, if the recently released Harvard study is accurate, given a little time you're going to hear many of the same voices in the Congress who have so vociferously demanded so-called tax reforms in the oil industry. Those individuals who have carried the legislative banners for disincentives to exploration and discovery and refused to support protective measures designed to at least permit our independent producers to compete in the world oil market and assure us of a domestic source of fossil fuel; you're going to hear many of those very same voices raised in righteous indignation when not only are we totally monopolized by foreign powers insofar as a fuel source is concerned, but this nation is held hostage as to price. And it's coming.

Gentlemen, I was informed that art of your mission here today is to really look into the question of the extent of the depression in our state. And I suggest to you here that you measure this in terms of the unprecedented bank failures that have occurred, of the thousands and thousands who have lost their jobs, of the unconscionable number of bankruptcies, and the terrible numbers of service businesses closed, and the corresponding repossessed properties, homes and businesses alike, followed in natural order by tremendously depressed property values, and absolutely no reasonable resale market.

You have heard that exploration money has virtually vanished, and we've set an all-time record low in active rig count.

Senator Johnston, you can tell your colleagues, certainly not those from Louisiana, they know, but Senator Domenici, and your other colleagues in the Congress, you can tell them very quickly what devastating results follow a major hurricane striking Louisiana.

I think we can assure you that those of us living and working in the State of Louisiana today are having real trouble discerning the difference between economic disaster brought on by hurricanes and what we are suffering because of politically selfish, economically stupid, Representative Tauzin as you said, and strategically dangerous national energy policy. No hurricane, in fact I'll be so bold as to say no group of hurricanes, has ever rendered unto this State of Louisiana such economic disaster as has this oil situation.

Direct federal relief in the form of low interest loans, debt forgiveness, interest and principal repayment delays, they should all be considered in attempting to revitalize our economy. You may not believe this to be part of your inquiry, but it's part of the problems of Louisiana, and certainly a part of the extent of our depression.

Gentlemen, I think that we are going to have to be very careful if the Congress and this Administration is not judged by history as having totally failed in the stewardship of our domestic oil and gas reserves and resources, should the Congress continue, the Administration continue our national energy policy which leaves us, the American people, to the whim and caprice, as the Governor said, of foreign governments, many of whom are hostile to everything we hold near and dear for our fuel supply.

The Congress still has a little time to address the energy concerns of this nation, and to adopt a truly national policy which can secure for ourselves and our posterity an independent American source of oil and gas. There should be no shame, there should be no reluctance, there should be no hesitation on the part of any member of our Congress in placing America's national security interests first.

Today, this morning you're in an economically, oil related, devastated State of Louisiana. In the not too very distant future you may be in Washington, D.C., declaring the entire country a disaster area, all because of the folly and inherent dangers of the present energy policy of the U.S. as it relates to the security of this entire nation.

What has happened, and is still happening in Louisiana's economy, could eventually envelope the country. I do not honestly believe any of us want that.

Thank you for your time. [Applause.]

[The prepared statement of Mr. Bauer follows:]

CARL W. BAUER
February 9, 1987
Lafayette, Louisiana

STATEMENT BEFORE UNITED STATES SENATE SUB-COMMITTEE

SENATOR JOHNSTON, DISTINGUISHED MEMBERS AND STAFF OF YOUR COMMITTEE, we are awfully glad you are here, here in Lafayette, Louisiana, to gather information relative to the rapidly developing and, I might add, rapidly deteriorating national energy situation. Those of us who live here are painfully aware of the economic results of our present national energy policy. I wish we had the time to expose each of you to the chaos and confusion, the unemployment, the bankruptcies, the repossessed homes and automobiles, the closed businesses in sum, the total economic disaster in this part of your country attributable to what we in the oil producing states are convinced is a short sighted, ill conceived and politically motivated so-called "ENERGY POLICY". It is indeed tragic that so many have suffered so much from the "disincentives" to domestic exploration and discovery, but it will become far more tragic when the suffering eventually involves this entire nation.

At the moment, the problems appear localized in our oil producing states, and if one is to accept national media reports, those politically unaffected are not really particularly concerned. While I cannot accept such a calloused and insensitive reaction to our problems I can understand it.

LOUISIANA, TEXAS and OKLAHOMA may be economically devastated, but the rest of the nation has yet to be tested. It has been my unfortunate experience, as a former State Legislator, that in so many, many areas of vital governmental concern, crisis, real serious crisis, has to dictate a resolve to face problems. Well, Gentlemen, I am convinced that we, you and I, LOUISIANA, TEXAS and OKLAHOMA and, YES, the entire UNITED STATES OF AMERICA, have a real serious energy problem. I believe you are going to have to shock your colleagues into an awareness of the severe national security risks facing our country as a result of the near collapse of our domestic exploration industry. I have no doubt that given time, and if the Harvard University energy study of recent date is correct, not very much time, we will hear many of the same voices in the Congress who have so vociferously demanded so-called "TAX REFORMS" in the oil industry; those individuals who have carried the Legislative Banners for disincentives to exploration and discovery and refused to support protective measures designed to at least permit our independent producers to compete in the world oil market and assure this nation of a domestic source of fossil fuel; we will hear many of those very same voices raised in righteous indignation when not only are we totally monopolized by foreign powers insofar as a fuel source is concerned, but held hostage as to price.

GENTLEMEN, I have been informed that part of your mission here is to determine the "EXTENT OF THE DEPRESSION" in the domestic oil industry. You have invited an interesting and informed panel of witnesses to testify, excusing the speaker, and I am sure you will receive a wealth of information on the extent of economic damage in our state. You will be furnished expert testimony, facts and figures addressing everything from the effects of price instability and taxes, to environmental constraints and loss of jobs. In fact, I would like to add to that body of information a piece of correspondence recently addressed to the President of the United States by Mr. Dan Frantzen, President of Stone Oil Company of Lafayette. I commend Mr. Frantzen's comments to you as a major additional source of extremely valuable and pertinent data in your overall area of inquiry. I have attached Mr. Frantzen's letter as Exhibit "A" to to my comments along with Exhibits "B" and "C" relative to declining bank assets and automobile sales which should give you a very clear picture of part of our problem.

Returning briefly to this question of the EXTENT OF THE DEPRESSION IN OUR STATE, may I again suggest to you that you measure this in terms of unprecedented bank failures; of thousands and thousands who have lost their jobs; bankruptcies; in the numbers of service businesses closed; in the corresponding repossessed properties, homes and businesses alike, followed in natural order by tremendously depressed property values, and absolutely no reasonable resale market. Exploration money has vanished and we recently set an all time record low in active rig count. Gentlemen, Senator Johnston can tell you what devastating results follow a major hurricane striking Louisiana. Let me assure you that those of us living and working in the State of Louisiana today are having real trouble discerning the difference between economic disaster brought on by hurricanes and what we are suffering because of a politically selfish, economically stupid and strategically dangerous national ENERGY POLICY. No hurricane, in fact I will be so bold as to say that no group of hurricanes, has ever rendered unto this State such economic disaster in every sense of the term. Direct federal relief in the form of low interest loans, debt forgiveness, interest and principal repayment delays, should all be considered in any attempt to revitalize our economy. You may not believe this to be part of your inquiry, but it is all part of the problems of LOUISIANA, and certainly a part of the extent of our depression. We are limited in our abilities and means to recover. I have to take note here of a recent wire service report on comments made last week by Rhode Island Senator John Chafee implying some support for legislative initiatives for the depressed U. S. Oil Industry, but adamant opposition to all oil import fee as a "very unfair proposal" and as a "severe blow to the homeowners and businesses of my state." The distinguished Senator expressed concern for possible additions to his average homeowners heating bill of about $240 annually. That possible figure of $240 will not gain much sympathy here against a measure of our real losses. I suggest to Senator Chafee and to you that history will eventually judge him, and the Congress as a body, as having totally failed in in its stewardship of our domestic oil and gas resources should he and the Congress continue a national energy policy which leaves us, the AMERICAN PEOPLE, to the whim and caprice of foreign governments for our fuel supply.

The CONGRESS still has a little time to address the energy concerns of our nation, to adopt a truly rational policy which can secure for ourselves and our posterity an INDEPENDENT AMERICAN SOURCE OF OIL AND GAS. There should be no shame, no reluctance, no hesitation on the part of any member of our Congress in placing America's national security interests first.

Today you are in an economically, oil related, devastated State of Louisiana. In the not too distant future you may be in Washington, D. C., declaring the entire country a disaster area, all because of the folly and inherent dangers of the present energy policy of the United States as it relates to the security of this ENTIRE NATION. What has happened, and is still happening in Louisiana's economy, could eventually envelope the country. I do not believe any of us want that result.

Thank you very much for your time.

EXHIBIT "A"

THE STONE PETROLEUM CORPORATION
P. O. BOX 52807
LAFAYETTE, LOUISIANA 70503

DAN R. FRANTZEN
PRESIDENT

October 10, 1986

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

On May 5, 1986, I sent you a letter regarding what, in my opinion, is a National Emergency which threatens the future security of America. It took me four days to research and write that letter (copy enclosed). In response, three months later, I received a mimeographed statement of administrative policy from the Department of the Treasury. It predated my letter by a month and addressed none of the issues.

Your advisors are trading the future security of America for short term artificial political and economic benefits. There is a basic flaw in the way they view free-enterprise. They are too simplistic and idealistic. They don't seem to understand that free-enterprise simply won't work in a global or worldwide economy. It only works in a system where everybody is playing by the same rules. Saudia Arabia, for example, can do the same thing, with impunity, that we here in America go to jail for doing. It's called "price fixing" or "predatory pricing". We have anti-trust laws in America to protect us against such activities. These laws do not apply to Saudia Arabia because they are outside of our system of jurisdiction. In the first six months of this year Saudia Arabia, by raising production levels, has dropped the world price of oil from $30.00 per barrel to $10.00 per barrel, which is below our domestic finding cost. This has brought our domestic oil and gas industry to a virtual standstill and will eventually lead to its demise if our government doesn't do something soon to protect this industry against these predatory pricing techniques of Saudia Arabia, et al.

Never in my career have I seen our industry so seriously threatened as it is today.

1. We have had massive layoffs. Hundreds of thousands of technically qualified people have left our industry and joined the ranks of the unemployed, never to return again.
2. Thousands of companies vital to our ongoing business have gone broke and taken with them years of experience which is irreplaceable. Included in this group are oil and gas companies, service companies and other related independent companies.

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3. We have had more bank failures this year than any year since the great depression, primarily because of large loans collateralized by oil.

4. Our imports are increasing at an alarming rate. When this price collapse first started, Saudia Arabia was our fourteenth largest importer. They are now number one as they have surpassed Canada and Mexico. I think this sends the very clear message that we can no longer count on Canada and Mexico for any more oil than we are now importing. We wouldn't be importing ever increasing amounts of oil from Saudia Arabia now, if we could get it from our friends and neighbors in Canada and Mexico. The answer is obvious - Canada and Mexico are now producing at, or near, capacity. In the last year, imports from Saudia Arabia have increased from 27,000 barrels per day to 722,000 barrels per day, a whopping 2700% - this is a travesty.

5. Exploration money has almost entirely vanished. You simply cannot raise money to drill wells when the world price of oil is unstable and at, or near, the finding cost or replacement cost in this country. This is valid regardless of incentives that may be retained in our tax code.

6. The bottom line is the active rig count. We started keeping records on active rigs forty-five years ago, in 1941. We recently set an all time, record low of 663 active rigs, down from 4,531 in 1981. This is reminiscent of the last time the active rig count was below 1,000 - just before the Arab oil embargo of 1973. This is tragic because the only way to reduce our dependency on foreign crude and find the natural gas necessary to satisfy this nation's needs, long term, is to drill wells.

America, with its factories, transportation and standard of living, moves basically on hydrocarbons. Over 70% of all the energy consumed in this nation comes from oil and gas. It is our life blood - it is a resource without which all other resources are of no avail. Our domestic reserves will dwindle as a result of the current drilling slump. It becomes obvious that we, in America, are setting the stage for the next domestic oil and gas shortage that will lead our nation into the next energy crisis. This sequence of events is inevitable unless, I repeat, our government does something soon to strengthen and stabilize the domestic oil and gas industry.

Now, what can our government do? We must stop allowing Saudia Arabia, et al, to dictate the world price of oil. We, in America, know what price it takes to maintain a strong, healthy, viable oil and gas industry. This is vital to the future of America because it offers the only means by which we can reduce our dependency on foreign oil.

The only way to salvage our domestic oil and gas industry and protect it against the predatory pricing tactics of Saudia Arabia, et al. is for our government to establish a variable import tax on all foreign crude and refined products. As a matter of fact, it shouldn't even be looked upon as an import tax at all. If our government can see fit to take billions of dollars out of our industry, in the form of a windfall profit tax, during the good times, then it should be willing to compensate the same industry when it is fighting for its very survival. Perhaps it should be thought of as a compensatory fee which would serve the same purpose against the OPEC Cartel as our anti-trust laws did against price fixing and predatory pricing in this country. Once the OPEC Cartel sees that our government is going to protect our domestic oil and gas industry, I predict they will lower their production rate and quickly cause the world price of oil to rise to that level set by the United States. The OPEC Cartel will not continue to idly stand by and see our government subsidized by low world oil prices.

What will this oil import tax do for the oil and gas industry and America? It will guarantee short term stability and healthy survival for the industry and lead to the greatest possible reduction of oil imports for America, thereby reducing our huge trade deficit. In addition, it will replace vital federal and state revenues lost as a result of these artificially low product prices. Also, it will add immediate stability to the many troubled banks throughout our country. And lastly, it will attract investment capital that will put many Americans and drilling rigs back to work. It will thereby serve as an insurance policy for the future security of America.

Now, what will happen if we don't get the oil import tax? There will be virtually no oil and gas industry in America within one year from now except for major companies who drill 10% of our onshore wells. The drilling rig count will stay low and our domestic reserves will dwindle further. In addition, we'll lose two to three million barrels per day of stripper crude which is marginal production from wells that are uneconomical to produce at these low, unstable prices. Once plugged, these wells will never be replaced. We will then, once again, become hostage to the OPEC nations and re-live the 1973 crisis. If we don't learn from history, we are destined to make the same mistakes again.

Our continued reliance upon foreign crude will do several other things - it will cause our present huge trade deficit to soar even further - it will force the closing of many more troubled banks throughout our country - it will eliminate hundreds of thousands more jobs - it will irrevocably reduce our standard of living long term as cheap gasoline and home heating fuel cannot last because oil prices will inevitably spiral upward again as engineered by the OPEC Cartel. Most importantly, it will have grave and irreparable consequences upon the national security of this country.

What are the arguments against an oil import tax? Some of the more common arguments are:

1. Our industries will be unable to compete with foreign industries.
2. The United States has existing treaties with countries that prohibit these kind of tariffs, even though these countries may be in the OPEC Cartel themselves.
3. Mexico and Canada will be financially damaged.
4. Higher gasoline prices and home heating fuel prices will result.

I don't think any of these arguments should override the need to have a strong, healthy, viable oil and gas industry in the event there is another confrontation, or war. Can we as a nation afford that gamble? Can we continue to jeopardize the future security of America for short term artificial economic prosperity? Most of the arguments against an oil import tax will no longer be valid when the OPEC Cartel brings the world price of oil to that level set by the United State through the use of a variable import tax.

In conclusion, I'd like to share with you some of my views on the big picture - the long haul. Where is America headed? There's an undercurrent in this country that goes much deeper than just the oil and gas industry. It touches most all industries in America. Lee Iacoca, in his recent autobiography, said, "By the end of this century, there will be no automobile industry or steel industry in America..." I think he's right, perhaps sooner. You can add to that list the textile industry, farming industry, hi-tech industry, chemical industry, timber industry, and now, the oil and gas industry. As I said earlier, the simplistic attitude regarding free-enterprise simply will not work in a global or worldwide economy. The reasons are obvious - all countries have different laws, taxes, incentives, raw product costs, labor costs, and standards of living. Certain of these vital American industries simply can not compete with all other nations without import taxes and/or quotas as evidenced by those weakened industries mentioned above.

What is the problem? The problem is very easy to identify. Abraham Lincoln identified it over one hundred years ago, "..A nation divided cannot stand.." Then, it was the north and the south. Today it is equally serious, Congress and industry.

What is the solution? The solution is equally easy to identify but very difficult to achieve. It can be identified in one word - incentives. Without incentives, you have no industry -- without industry, America has no future as a world leader.

How can this solution be accomplished? As I said earlier, with great difficulty. Industry and Congress must stop pointing the finger at each other. Instead, they should join hands and work toward common solutions to the obvious problems that face all industries in America. It's going to take a concerted effort of Congress working together with top business leaders from all industries. They're going to have to revolutionize old laws by implementing new laws which give adequate incentives to American businesses to make them once again competitive with any nation in the world. If it takes import taxes and/or quotas in certain instances where unfair trade advantages exist, so be it.

Our government needs to start thinking about America first and our trading partners second. Industry is the life blood of America - it leads to capital formation, which yields productivity, from which new tax revenue is generated for our government. We must strengthen and stabilize big industry in America if we, as a nation, are to maintain our number one ranking as the free, independent world leader that we once were.

What is the alternative? Big business in America, like the dinosaur, will soon become extinct and our country will simply become another parasitic nation dependent upon imports and a printing press for money, as evidenced by the now largest trade deficit in the history of the United States.

Here in America there is no shortage of dreams or creativity. There's no shortage of courage, ability, desire or enthusiasm. All of these wonderful qualities are still held in great abundance by many great American people. There's only a shortage of incentives on how to stimulate these great American people and get industry back on track and make America the great, proud, free, independent nation that she once was, with her smoke stacks, her manufactured products and her strong, healthy industries.

The choice is yours, Mr. President. If you like things as they are, so be it. If you don't, then start a crusade immediately to strengthen and stabilize all industries in America to make Her the foremost, admired and respected independent world leader that She once was and, thereby, balance the deficit and pay down the national debt, as you promised the American people when you were elected.

As Einstein said, as an old mature man, "We are put here on Earth for one reason only and that is to serve others." He served so well that he is not only immortal, but more importantly, he left the world a better place because he lived.

You, too, have the God given talent to do this Mr. President. In order to achieve this worthy goal, you must relentlessly place ahead of political expediency, uninformed public opinion and ubiquitous critics, that which you know, in your heart, is best for this greatest nation on earth - America.

As Theodore Roosevelt said, "It is not the critic who counts... the credit actually goes to the person who is in the arena... far better it is to dare mighty things... than to take rank with those spirits who live in the gray twilight that knows not victory, nor defeat." You can only bring this victory to America now -- not later!

Respectfully yours,

Dan R. Frantzen

Dan R. Frantzen

DRF/1b

Enclosure

FEB 5,1987

MARKET ANALYSIS
LAFAYETTE BANKS

EXHIBIT B

IN THOUSANDS

	ACADIANA NATIONAL	BANK OF LAFAYETTE	COMMERCE AND ENERGY	FIRST NATIONAL	GUARANTY	HIBERNIA	MIDSOUTH NATIONAL	WHITNEY NATIONAL	TOTAL
TOTAL ASSETS									
DEC 1986	42277	58015	42304	363475	713556	121888	27967	143167	1512649
DEC 1985	43592	68468	49770	432200	783469	80547	22143	243606	1723575
DEC 1984	31413	81288	46270	429004	847900	76275	0	326163	1838313
CHANGE	10864	-23273	-3966	-65529	-134344	45613	27967	-182996	-325664
PERCENT CHANGE	34.58%	-28.63%	-8.57%	-15.27%	-15.84%	59.80%	*	-56.11%	-17.72%
TOTAL LOANS									
DEC 1986	22378	31523	31583	172357	475672	55903	17613	31523	838552
DEC 1985	25572	45939	36152	250635	555023	48788	13359	181861	1157329
DEC 1984	18077	55104	35778	258498	551135	47179	0	218968	1184739
CHANGE	4301	-23581	-4195	-86141	-75463	8724	17613	-187445	-346187
PERCENT CHANGE	23.79%	-42.79%	-11.73%	-33.32%	-13.69%	18.49%	*	-85.60%	-29.22%
TOTAL DEPOSITS									
DEC 1986	36616	54142	38748	323115	643596	113389	22313	142044	1373963
DEC 1985	35676	62954	45283	378339	693262	69851	19088	202414	1506867
DEC 1984	25980	74925	43074	364475	758966	64877	0	289719	1622016
CHANGE	10636	-20783	-4326	-41360	-115370	48512	22313	-147675	-248053
PERCENT CHANGE	40.94%	-27.74%	-10.04%	-11.35%	-15.20%	74.78%	*	-50.97%	-15.29%
TOTAL EQUITY									
DEC 1986	4850	3145	2566	13460	38993	7130	3121	0	73265
DEC 1985	5253	4229	3897	18662	51690	9223	2916	7665	103535
DEC 1984	5001	5219	2576	29928	56054	9413	0	17430	125621
CHANGE	-151	-2074	-2010 *	-16468	-17061	-2283	3121	-17430	-52356
PERCENT CHANGE	-3.02%	-39.74%	-78.03%	-55.03%	-30.44%	-24.25%	*	-100.00%	-41.68%

NOTES*

FINANCIALS WERE NOT AVAILABLE FOR HUB CITY BANK.
COMMERCE AND ENERGY BANK RAISED $2,000 IN CAPITAL IN 1986.
MIDSOUTH NATIONAL BANK OPENED ON 2-7-85.
WHITNEY NATIONAL BANK PURCHASED AMERCIAN BANK AFTER IT FAILED IN 1986.

EXHIBIT "C"
Page 1

LAFAYETTE AREA

MOTOR VEHICLE REGISTRATION SERVICE
RECAPITULATION OF NEW CARS

JANUARY 1987

	TOTAL	RETAIL	LEASE	RENTL
BUICK				
BROUSSARD BUICK	4	4	0	0
SHETLER OLDS	5	4	1	0
EVANGELINE MOTORS	14	13	1	0
ACADIAN BUIC PONT	5	3	2	0
DIESI BUIC CADI PON	3	3	0	0
MOREIN MOTORS	2	2	0	0
OUT OF STATE	2	1	1	0
**TOTALS BUICK	35	30	5	0
CADILLAC				
SCHOEFFLER CADILLAC	15	15	0	0
J P THIBODEAUX	1	1	0	0
DIESI PONT CADI	1	1	0	0
**TOTALS CADILLAC	17	17	0	0
CHEVROLET				
RAY CHEV OLDS	3	3	0	0
MARTIN CHEVROLET	3	3	0	0
A J DOHMANN CHEV	3	3	0	0
GAINNIE CHEVROLET	3	3	0	0
JOHN R YOUNG CHEV	5	5	0	0
EDGAR CHEVROLET	1	1	0	0
SERVICE CHEVROLET	40	37	3	0
MUSSON-PATOUT CHEV	17	5	3	9
JOHN SHAW CHEV	8	8	0	0
DOUET MOTORS	3	3	0	0
VEILLON MOTORS	1	1	0	0
OUT OF STATE	12	3	9	0
**TOTALS CHEVROLET	99	73	15	9
CHRYSLER				
FRENZEL MOTORS	4	3	1	0
LAPREYROUSE MOTORS	3	3	0	0
LAFAYETTE MOTORS	10	10	0	0
MAIN MOTORS	3	3	0	0
OPELOUSAS COURTESY	1	1	0	0
**TOTALS CHRYSLER	21	20	1	0
DODGE				
FRENZEL MOTORS	3	3	0	0
DEPENDABLE DODGE	9	9	0	0
MAIN MOTORS	3	3	0	0
DOUET CHRYSLER	2	2	0	0
OUT OF STATE	3	0	3	0
**TOTALS DODGE	20	17	3	0

	TOTAL	RETAIL	LEASE	RENTL
FORD				
BAY CITY MOTORS	7	7	0	0
EDGAR FORD	12	11	1	0
HORECKY MOTORS	1	1	0	0
PERRY PITRE FORD	14	14	0	0
ROBIN MOTORS	3	3	0	0
ACADIANA FORD	2	2	0	0
HUB CITY FORD	46	43	3	0
BORDELON MOTORS	7	6	1	0
ARCENEAUX FORD	3	1	2	0
OUT OF STATE	3	1	2	0
**TOTALS FORD	98	89	9	0
LINCOLN				
HAYDELL LINC MERC	2	2	0	0
DICKHAM LINC MERC	15	14	1	0
AUTO MART LINC MERC	1	1	0	0
**TOTALS LINCOLN	18	17	1	0
MERCURY				
PERRY PITRE FORD	3	3	0	0
BICKHAM LINC MERC	13	11	2	0
AUTO MART LINC MERC	4	2	2	0
BORDELON MOTORS	6	6	0	0
OUT OF STATE	1	1	0	0
**TOTALS MERCURY	27	23	4	0
OLDSMOBILE				
RAY CHEV OLDS	6	6	0	0
SHETLER OLDS	3	2	1	0
SONNIER OLDS	3	3	0	0
MOSS OLDSMOBILE	23	23	0	0
J P THIBODEAUX	14	14	0	0
ROY MOTORS	8	6	2	0
OUT OF STATE	1	0	1	0
**TOTALS OLDSMOBILE	58	54	4	0

	TOTAL	RETAIL	LEASE	RENTL
PLYMOUTH				
SONNIER CHRY-PLYM	2	2	0	0
LAPEYROUSE MOTORS	1	1	0	0
LAFAYETTE MOTORS	15	13	0	2
MAIN MOTORS	2	2	0	0
OPELOUSAS COURTESY	4	4	0	0
DOUET CHRYSLER	2	2	0	0
VEILLON MOTORS	1	1	0	0
OUT OF STATE	1	1	0	0
**TOTALS PLYMOUTH	28	26	0	2
PONTIAC				
BROUSSARD PONT BUIC	3	2	1	0
MEAUX PONTIAC	2	2	0	0
LOUISIANA MOTORS	21	20	1	0
DIESI PONT CADI	2	2	0	0
MOREIN MOTORS	1	1	0	0
OUT OF STATE	14	1	13	0
**TOTALS PONTIAC	43	28	15	0

Acadiana American Automobile
Registrations

January 1986..........984
January 1987..........464

January 1983........2000±

REPORTING PERIOD JAN 1 THRU JAN 31 1987

TOTAL NEW CARS 464 396 57 11

PREPARED & COMPILED BY: MOTOR VEHICLE REGISTRATION SERVICE, P.O. BOX 24131, NEW ORLEANS, LA. 70184 PHONE 834-4224 COPYRIGHT: 1987

EXHIBIT "C"
Page 2

MOTOR VEHICLE REGISTRATION SERVICE
RECAPITULATION OF NEW CARS

LAFAYETTE AREA

JANUARY 1986

	TOTAL	RETAIL	LEASE	RENTL
AMERICAN				
BAYOULAND MOTORS	1	1	0	0
**TOTALS AMERICAN	1	1	0	0
BUICK				
BROUSSARD BUICK	9	9	0	0
SHETLER OLDS	5	5	0	0
JERE LONGMAN BUIC	5	5	0	0
BAYOU HERITAGE BUIC	3	3	0	0
EVANGELINE MOTORS	65	65	0	0
ACADIAN BUIC PONT	6	5	1	0
DIESI BUIC CADI PON	8	8	0	0
MOREIN MOTORS	3	3	0	0
OUT OF STATE	3	1	2	0
**TOTALS BUICK	107	104	3	0
CADILLAC				
SCHOEFFLER CADILLAC	35	35	0	0
J P THIBODEAUX	5	5	0	0
DIESI PONT CADI	1	1	0	0
OUT OF STATE	2	1	1	0
**TOTALS CADILLAC	43	42	1	0
CHEVROLET				
RAY CHEV OLDS	5	5	0	0
DOMINGUES MOTORS	10	7	3	0
GAINNIE CHEVROLET	8	8	0	0
ROGER TRAHAN CHEV	1	1	0	0
EDGAR CHEVROLET	4	4	0	0
KEN DUCOTE CHEV	6	6	0	0
SERVICE CHEVROLET	74	66	8	0
MUSSON-PATOUT CHEV	18	16	2	0
JOHN SHAW CHEV	13	13	0	0
DOUET MOTORS	5	5	0	0
VEILLON MOTORS	8	8	0	0
OUT OF STATE	41	9	30	2
**TOTALS CHEVROLET	193	148	43	2

	TOTAL	RETAIL	LEASE	RENTL
CHRYSLER				
FRENZEL MOTORS	7	7	0	0
SONNIER CHRY-PLYM	2	2	0	0
LAPEYROUSE MOTORS	2	2	0	0
LAFAYETTE MOTORS	9	9	0	0
MAIN MOTORS	5	5	0	0
OPELOUSAS COURTESY	2	2	0	0
DOUET CHRYSLER	3	3	0	0
VEILLON MOTORS	1	1	0	0
OUT OF STATE	2	1	1	0
**TOTALS CHRYSLER	33	32	1	0
DODGE				
FRENZEL MOTORS	2	2	0	0
LAPEYROUSE MOTORS	1	1	0	0
DEPENDABLE DODGE	20	19	1	0
MAIN MOTORS	2	2	0	0
OPELOUSAS COURTESY	4	4	0	0
VEILLON MOTORS	3	3	0	0
OUT OF STATE	1	0	1	0
**TOTALS DODGE	33	31	2	0
FORD				
BAY CITY MOTORS	9	9	0	0
EDGAR FORD	12	12	0	0
HORECKY MOTORS	2	2	0	0
WES NELSON FORD	5	5	0	0
PERRY PITRE FORD	13	13	0	0
FRANKLIN FORD-MERC	2	2	0	0
ROBIN MOTORS	3	3	0	0
TERRY NAVARRE FORD	1	1	0	0
HUB CITY FORD	110	108	2	0
LEBLANC-BROUSSARD	14	14	0	0
BORDELON MOTORS	21	17	4	0
ARCENEAUX FORD	3	3	0	0
OUT OF STATE	17	10	7	0
**TOTALS FORD	212	199	13	0
LINCOLN				
HAYDELL LINC MERC	4	4	0	0
BICKHAM LINC MERC	16	16	0	0
AUTO MART LINC MERC	6	6	0	0
BORDELON MOTORS	4	4	0	0
OUT OF STATE	6	0	0	6
**TOTALS LINCOLN	36	30	0	6

	TOTAL	RETAIL	LEASE	RENTL
MERCURY				
HAYDELL LINC MERC	5	5	0	0
SHETLER MOTORS	1	1	0	0
WES NELSON FORD-MER	3	3	0	0
PERRY PITRE FORD	9	9	0	0
FRANKLIN FORD-MERC	3	3	0	0
BICKHAM LINC MERC	22	22	0	0
AUTO MART LINC MERC	5	5	0	0
BORDELON MOTORS	11	11	0	0
OUT OF STATE	1	0	1	0
**TOTALS MERCURY	60	59	1	0
OLDSMOBILE				
RAY CHEV OLDS	12	12	0	0
SHETLER OLDS	15	15	0	0
SONNIER OLDS	7	7	0	0
BOBBY BERNARD OLDS	31	31	0	0
J P THIBODEAUX	22	22	0	0
ROY MOTORS	23	22	1	0
MOREIN MOTORS	1	1	0	0
OUT OF STATE	6	3	3	0
**TOTALS OLDSMOBILE	117	113	4	0
PLYMOUTH				
WES NELSON	2	2	0	0
SONNIER CHRY-PLYM	1	1	0	0
LAPEYROUSE MOTORS	2	2	0	0
LAFAYETTE MOTORS	15	14	1	0
MAIN MOTORS	5	5	0	0
OPELOUSAS COURTESY	10	10	0	0
DOUET CHRYSLER	4	4	0	0
OUT OF STATE	1	1	0	0
**TOTALS PLYMOUTH	40	39	1	0
PONTIAC				
BROUSSARD PONT BUIC	6	6	0	0
MEAUX PONTIAC	10	10	0	0
JERE LONGMAN PONT	9	8	1	0
BAYOU HERITAGE PONT	7	7	0	0
LOUISIANA MOTORS	50	50	0	0
ACADIAN PONT BUIC	9	8	1	0
DIESI PONT CADI	10	10	0	0
MOREIN MOTORS	1	1	0	0
OUT OF STATE	7	3	4	0
**TOTALS PONTIAC	109	103	6	0
TOTAL NEW CARS	984	901	75	8

REPORTING PERIOD JAN 1 THRU JAN 31 1986

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The **Chairman**. Thank you very much, Mr. Bauer for an excellent statement.

I would next like to call on Mr. Gene Fortier, who is president of the Greater Lafayette Chamber of Commerce, and who has done such an excellent job helping us put this hearing together.

Mr. Fortier.

STATEMENT OF GENE FORTIER, PRESIDENT, GREATER LAFAYETTE CHAMBER OF COMMERCE, LAFAYETTE, LA

Mr. **Fortier**. Senator Johnston, you are most kind.

Good morning and thank you all for the opportunity to testify before this Committee.

My name is, as you mentioned, Gene Fortier and I'm appearing here today as the president of the Greater Lafayette Chamber of Commerce, an organization comprising two thousand business and professional firms, representing over twenty-five thousand employees.

In addition, I'm a small businessman operating a State Farm Insurance Office here in Lafayette, servicing some four thousand policyholders.

Our hope is that despite the nature of much of the testimony you will have heard this morning, that you will have spent a pleasant time in Acadiana enjoying the good nature of our people, sampling some of the wonderful sights of our region, and, of course, reveling in our delicious Cajun cuisine.

It is perhaps because of these and many other strong, positive attributes of Acadiana, South Louisiana, and the entire state that these current economic times are difficult to swallow. For most of the population of this state, and the southern region in particular, the past two years have represented the absolute worst economic conditions in 50 years.

One way in which this was graphically brought home recently was the occasion of our annual Chamber of Commerce banquet this past November. At that banquet I asked the 1,000 business leaders in attendance to stand while I asked the following question:

Look around you and think for a moment about everything that has happened in your life and in your community since we met here last November. If things are tougher now than they were then, if it is a bigger struggle to be successful and make ends meet, if you have seen your real estate investments diminished, if you have less money in the bank today than you had a year ago, or if you have witnessed family members of close friends beset by intense economic difficulties, if any of these things apply to you, I asked them to please sit down.

And, guess what? One thousand people sat down.

It is true that the horn was a plenty in the late 70's and early 80's; the region was basking in a new found prosperity. And economic opportunity was abundant.

One of the messages that you should remember from today is the fact that this city, this region, and this state, had absolutely nothing, nothing to do with causing either the prosperity of the late 70's or the depths of the current depression.

We have been small players, victims if you will, in a complicated world game of geo-economics and politics. Just as we were thoroughly surprised by the extraordinary gains experienced earlier, we are now totally bewildered and helpless in the face of the current economic climate.

Louisiana, and particularly the southern region, are not new to the oil and gas industry. Large amounts of oil and gas have been produced onshore in Louisiana for over 60 years. The resulting exploration and development were responsible for much of the region's employment growth nd largely responsible for the state's advancement after the depression of the 1930's

In spite of this extensive development on land, Louisiana was never truly able to match the associated development of our neighboring State of Texas. Louisiana's most significant contribution to the industry came in the last 40's and early 50's, with the onslaught of offshore exploration.

It is here in Louisiana that the technology was developed to drill in deep waters, now over a thousand feet deep, and hazardous environments, and to depths previously unthought of in an oilman's wildest dreams. From these offshore waters have come oil and natural gas to fuel our transportation needs for almost 40 years, sufficient natural gas to heat homes in the Midwest and Northeast, and sufficient fuel oils to run this country's industrial and public utility sectors.

Furthermore, this same offshore industry was the cradle for the world's offshore exploration industry. I feel perfectly comfortable in saying that you can go to any region of the world in which there's offshore drilling activity—the Middle East, Egypt, African Coasts, Far East, Alaska, Newfoundland, or the North Sea—and you will meet someone who has lived or worked in South Louisiana. Perhaps it is the spirit of these people, that even in the face of total economic catastrophe, we are still particularly proud of the contributions we have made not only to the technological advances of the industry, but to the advances of this country. We helped significantly to make these advances easier through our efforts in discovering, producing and refining adequate supplies of oil and gas.

Through no foresight or fault of our own, we reaped a few brief years of prosperity followed by the disaster of this depression. We have indeed been pawns in an international economic game, a game in which the players are not of equal size, a game in which we, as the little guys, were given a few small benefits, only to realize later that we would lose proportionately more than the big players when the game was over.

The regional losers have not only been the oil and gas workers or those owning oil and gas properties, but all of us who are a part of this economy. The losers are all of us.

Firms which supplied products and services to the industry have witnessed an evaporation of markets and customers. The few customers which have survived are nowhere near the sizes which characterized the early 80's.

The first effects were delinquencies in bill paying and servicing of bank debt. In an effort to survive, overhead was trimmed. Eventually as markets did not improve, a paring of payrolls and employee reductions soon followed.

The **Chairman**. Mr. Fortier, I hate to interrupt you, but we've got five minutes left.

Mr. **Fortier**. I have about three minutes left, Senator. If you don't mind, I think I will get to the crux of it very quickly.

That the bankruptcy starting in 1984 with 3,000 in this area, went to 4,000 in 1985, hits almost 7,000 in 1986; went over 100 percent in three years.

This dependency on insecure sources of oil has several important consequences. First, it makes us vulnerable to oil disruptions despite the few hundred million barrels in the strategic petroleum reserve.

In the event that there was a national emergency, strategic defense needs would surely suffer. Couple this with the fact that the collapse in oil prices has virtually shut down exploration and the resulting addition to new domestic reserves, and we have the possible makings of an even more serious consequences for the nation's economy and the nation's defense.

In my judgment the only feasible response is the imposition of a fee on import oil. Such a fee would reduce the country's dependence on imported oil and help to salvage a domestic industry which is so vital to the future of this country.

And, yes, the latter revitalization will be critical if we are to breathe new life into the state, city and region.

But remember, the cost of not doing so is far greater in the longer run than those of the immediately visible short run.

Now, if I may, just have a second, Senator, not a second but sixty seconds. Now if I may I would like to change hats and speak as president of the Chamber of Commerce, to speak as an individual who is a specific example of the tens of thousands of people who have been financially destroyed by this debacle.

Last week while in the office working on putting this Senate Energy Hearing together, a Sheriff's Deputy walked into my office to serve me with this, a summons representing a suit by a bank totalling a half million dollars for a real estate investment that went busted.

Now in order to help you appreciate the magnitude of our economic collapse, let me share with you a few facts about this investment. It was a partnership made up of one retired F.B.I. agent, two an attorney, three a banker, an investor, three real estate developers, an oil man and myself; a total of nine.

This was just a plain vanilla subdivision development here in town, in which we all signed in solido. In other words, we're all responsible for each other's debt on the development.

Today, today the retired F.B.I. agent is bankrupt. The attorney is bankrupt. The banker is broke. The investor is bankrupt. The three real estate developers are all busted. The oil man is broke. Myself, let me tell you about myself. [Laughter.] Wait. It gets better. In January of 1984 my wife and I had real estate holdings worth two and a half million dollars, acquired from nearly eighteen years of saving and investing. Investing in single-family homes, duplexes, triplexes, fourplexes, and our own office building, plus this one subdivision partnership.

Investments that enabled us to build up a substantial net worth. That was 1984. Today, three years later our real estate holdings have fallen sixty percent in value to less than one million dollars, leaving us with a net worth, and I want to let you know I am not proud to say this—I am quite frankly embarrassed—to a minus net worth of $760,000.

Now, if I may paraphrase that haunting melody from the Broadway play Evita, "Don't Cry For Me." No, don't cry for Gene Fortier, or for Lafayette, or for Acadiana, and don't cry for Louisiana. But I'll tell you this, that if we do not insure a secure long-term source of energy for this country we will be crying, and this country will be asking itself: How did we let this happen?

Thank you. [Applause.]

[The prepared statement of Mr. Fortier follows:]

GENE FORTIER'S REMARKS

U.S. SENATE ENERGY HEARING, FEBRUARY 9, 1987

GOOD MORNING AND THANK YOU FOR THE OPPORTUNITY TO TESTIFY BEFORE THIS COMMITTEE. MY NAME IS GENE FORTIER AND I AM APPEARING HERE TODAY AS THE PRESIDENT OF THE GREATER LAFAYETTE CHAMBER OF COMMERCE, AN ORGANIZATION COMPRISED OF 2,250 BUSINESS AND PROFESSIONAL FIRMS. IN ADDITION, I AM A SMALL BUSINESSMAN OPERATING A STATE FARM INSURANCE OFFICE HERE IN LAFAYETTE. MY HOPE IS THAT DESPITE THE NATURE OF MUCH OF THE TESTIMONY YOU WILL HEAR THIS MORNING, YOU WILL HAVE SPENT A FEW PLEASANT HOURS OR DAYS IN ACADIANA -- ENJOYING THE GOOD NATURE OF OUR PEOPLE, SAMPLING SOME OF THE WONDERFUL SIGHTS OF OUR REGION, AND, OF COURSE, REVELING IN OUR DELICIOUS CAJUN CUISINE. IT IS PERHAPS BECAUSE OF THESE AND MANY OTHER STRONG, POSITIVE ATTRIBUTES OF ACADIANA, SOUTH LOUISIANA, AND THE ENTIRE STATE THAT THESE CURRENT ECONOMIC TIMES ARE SO DIFFICULT TO SWALLOW. FOR MOST OF THE POPULATION OF THIS STATE, AND OF THIS SOUTHERN REGION IN PARTICULAR, THE PAST TWO YEARS HAVE REPRESENTED THE ABSOLUTE WORST ECONOMIC CONDITIONS IN 50 YEARS. ONE WAY IN WHICH THIS WAS GRAPHICALLY BROUGHT HOME TO ME RECENTLY WAS THE OCCASION OF OUR CHAMBER OF COMMERCE BANQUET THIS PAST NOVEMBER. I ASKED THE 1,000 OR SO BUSINESS PEOPLE IN ATTENDANCE TO STAND WHILE I ASKED THE FOLLOWING QUESTIONS:

"LOOK AROUND YOU AND THINK FOR A MOMENT ABOUT EVERYTHING THAT HAS HAPPENED IN YOUR LIFE AND YOUR COMMUNITY SINCE WE MET HERE LAST NOVEMBER ... IF THINGS ARE TOUGHER NOW THAN THEY WERE THEN, IF IT IS A BIGGER STRUGGLE TO BE SUCCESSFUL AND MAKE ENDS MEET, IF YOU HAVE SEEN YOUR REAL ESTATE INVESTMENTS DIMINISHED, IF YOU HAVE LESS MONEY IN THE BANK TODAY THAN YOU HAD A YEAR AGO, OR IF YOU HAVE WITNESSED FAMILY MEMBERS OR CLOSE FRIENDS BESET BY INTENSE ECONOMIC DIFFICULTIES, IF ANY OF THESE THINGS APPLY TO YOU, PLEASE SIT DOWN." EVERYONE IN ATTENDANCE SAT DOWN. IT IS TRUE THAT THE HORN WAS A PLENTY IN THE LATE 1970'S AND EARLY 1980'S; THAT THE REGION WAS BASKING IN A NEW FOUND PROSPERITY; AND ECONOMIC OPPORTUNITIES WERE ABUNDANT. ONE OF THE MESSAGES THAT YOU SHOULD REMEMBER FROM TODAY IS THE FACT THAT THIS REGION, THIS CITY, AND THIS STATE, HAD ABSOLUTELY NOTHING TO DO WITH CAUSING EITHER THE PROSPERITY OF THE LATE 1970'S OR THE DEPTHS OF THE CURRENT DEPRESSION. WE HAVE BEEN SMALL PLAYERS, VICTIMS IF YOU WILL, IN A COMPLICATED WORLD GAME OF GEO-ECONOMICS AND POLITICS. JUST AS WE WERE THOROUGHLY SURPRISED BY THE EXTRAORDINARY GAINS EXPERIENCED EARLIER, WE ARE NOW TOTALLY BEWILDERED AND HELPLESS IN THE FACE OF THE CURRENT ECONOMIC CLIMATE.

LOUISIANA, AND PARTICULARLY THE SOUTHERN REGION, ARE NOT NEW TO THE OIL AND GAS INDUSTRY. LARGE AMOUNTS OF OIL AND GAS HAVE BEEN PRODUCED ONSHORE IN LOUISIANA FOR OVER 60 YEARS. THE RESULTING EXPLORATION AND DEVELOPMENT WERE RESPONSIBLE FOR MUCH OF THIS REGION'S EMPLOYMENT GROWTH AND LARGELY RESPONSIBLE FOR THE STATE'S ADVANCEMENT AFTER THE DEPRESSION OF THE 1930'S. IN SPITE OF THIS EXTENSIVE DEVELOPMENT ON LAND, LOUISIANA WAS NEVER TRULY ABLE TO MATCH THE ASSOCIATED DEVELOPMENT OF OUR NEIGHBORING STATE OF TEXAS. LOUISIANA'S MOST SIGNIFICANT CONTRIBUTION TO THE INDUSTRY CAME IN THE LATE 1940'S AND EARLY 1950'S, WITH THE ONSLAUGHT OF OFFSHORE EXPLORATION. IT IS HERE IN LOUISIANA THAT THE TECHNOLOGY WAS DEVELOPED TO DRILL IN DEEP WATER, IN HAZARDOUS ENVIRONMENTS, AND TO DEPTHS PREVIOUSLY UNTHOUGHT OF IN AN OILMAN'S WILDEST DREAMS. FROM THESE OFFSHORE WATERS HAVE COME OIL AND NATURAL GAS TO FUEL AUTOMOBILES FOR ALMOST 40 YEARS, SUFFICIENT NATURAL GAS TO HEAT HOMES IN THE MIDWEST AND NORTHEAST, AND SUFFICIENT FUEL OILS TO RUN THIS COUNTRY'S INDUSTRIAL AND PUBLIC UTILITY SECTORS. FURTHERMORE, THIS SAME OFFSHORE INDUSTRY WAS THE CRADLE FOR THE WORLD'S OFFSHORE EXPLORATION INDUSTRY. I FEEL PERFECTLY COMFORTABLE IN SAYING THAT YOU CAN GO TO ANY REGION OF THE WORLD IN WHICH

THERE IS OFFSHORE DRILLING ACTIVITY -- THE MIDDLE EAST, EGYPT, AFRICAN COASTS, FAR EAST, ALASKA, NEWFOUNDLAND, OR THE NORTH SEA -- AND YOU WILL MEET SOMEONE WHO HAS LIVED OR WORKED IN SOUTH LOUISIANA. PERHAPS IT IS THE SPIRIT OF THESE PEOPLE, THAT EVEN IN THE FACE OF TOTAL ECONOMIC CATASTROPHE, WE ARE STILL PARTICULARLY PROUD OF THE CONTRIBUTIONS WE HAVE MADE NOT ONLY TO THE TECHNOLOGICAL ADVANCES OF THE INDUSTRY, BUT TO THE ADVANCES OF THIS COUNTRY. WE HELPED SIGNIFICANTLY TO MAKE THOSE ADVANCES EASIER THROUGH OUR EFFORTS IN DISCOVERING, PRODUCING AND REFINING ADEQUATE SUPPLIES OF OIL AND GAS.

THROUGH NO FORESIGHT OR FAULT OF OUR OWN, WE REAPED A FEW BRIEF YEARS OF PROSPERITY FOLLOWED BY THE DISASTER OF THIS DEPRESSION. WE HAVE INDEED BEEN PAWNS IN AN INTERNATIONAL ECONOMIC GAME, A GAME IN WHICH THE PLAYERS ARE NOT OF EQUAL SIZE, A GAME IN WHICH WE, AS THE LITTLE GUYS, WERE GIVEN A FEW SMALL BENEFITS, ONLY TO REALIZE LATER THAT WE WOULD LOSE PROPORTIONATELY MORE THAN THE BIG PLAYERS WHEN THE GAME WAS OVER. THE REGIONAL LOSERS HAVE NOT ONLY BEEN THE OIL AND GAS WORKERS OR THOSE OWNING OIL AND GAS PROPERTIES, BUT ALL OF US WHO ARE A PART OF THIS ECONOMY. THE LOSERS ARE ALL OF US!

FIRMS WHICH SUPPLIED PRODUCTS AND SERVICES TO THE INDUSTRY HAVE WITNESSED AN EVAPORATION OF MARKETS AND CUSTOMERS. THE FEW CUSTOMERS WHICH HAVE SURVIVED ARE NOWHERE NEAR THE SIZES WHICH CHARACTERIZED THE EARLY 1980'S. THE FIRST EFFECTS WERE DELINQUENCIES IN BILL PAYING AND SERVICING OF BANK DEBT. IN AN EFFORT TO SURVIVE, OVERHEAD WAS TRIMMED. EVENTUALLY AS MARKETS DID NOT IMPROVE, A PARING OF PAYROLLS AND EMPLOYEE REDUCTIONS SOON FOLLOWED. NATURALLY THE RISE IN UNEMPLOYMENT WAS ACCOMPANIED BY A DECLINE IN INCOME. SOON RETAIL SALES SUFFERED AND LARGE PURCHASES WERE EITHER DELAYED OR TOTALLY CEASED. THE ULTIMATE OUTCOME OF THESE DYNAMICS HAS BEEN UNHEARD OF AND HISTORICALLY HIGH UNEMPLOYMENT RATES, UNPRECEDENTED NUMBERS OF PERSONAL AND BUSINESS BANKRUPTCIES, AS MANY AS 4,500 HOMES ON THE MARKET FOR SALE AT ONE TIME (IN A CITY OF ABOUT 50,000 HOUSEHOLDS), AND AS MANY AS 1.5 MILLION SQUARE FEET OF VACANT COMMERCIAL SPACE. WITH RESPECT TO BANKRUPTCIES, PLEASE NOTE THE NUMBER OF FILINGS FOR THE WESTERN DISTRICT OF LOUISIANA IN THE LAST THREE YEARS. THERE WERE 3,129 FILINGS IN 1984, 4,106 IN 1985 AND 6,736 IN 1986, AN OVER 100% INCREASE IN THREE YEARS! ABOVE ALL ELSE, THE MOST TRAGIC ASPECT OF THIS DEPRESSION IS NOT THE MATERIAL LOSS BUT THE WASTE OF SIGNIFICANT

HUMAN RESOURCE AND POTENTIAL.

AS I SAID EARLIER, WE ARE PARTICULARLY PROUD OF OUR CONTRIBUTIONS TO THE INDUSTRY'S TECHNOLOGICAL BASE AND TO THE CONTRIBUTIONS WE HAVE MADE TO BROADER ECONOMIC ADVANCES IN THE UNITED STATES BY PRODUCING ABUNDANT SUPPLIES OF SECURE OIL AND GAS. IT IS THIS SECURE SOURCE OF ENERGY WHICH IS IN JEOPARDY. EVERY DAY, THE UNTIED STATES IS BECOMING INCREASINGLY DEPENDENT ON OPEC FOR ITS CRUDE OIL. IN 1977 THE U.S. IMPORTED 72% OF ITS NET OIL IMPORTS FROM OPEC. THIS DEPENDENCY DECLINED TO 43% IN 1985. HOWEVER, BY THE THIRD QUARTER OF 1986, ALMOST 53% OF THE U.S.'S NET OIL IMPORTS WERE COMING FROM OPEC SOURCES. (U.S. DEPARTMENT OF ENERGY, ENERGY INFORMATION ADMINISTRATION, MONTHLY ENERGY REVIEW, SEPTEMBER, 1986, P. 17.).

THIS DEPENDENCY ON INSECURE SOURCES OF OIL HAS SEVERAL IMPORTANT CONSEQUENCES. FIRST, IT MAKES US VULNERABLE TO OIL DISRUPTIONS DESPITE THE FEW HUNDRED MILLION BARRELS IN THE STRATEGIC PETROLEUM RESERVE. SUCH DISRUPTIONS WILL CAUSE SUBSTANTIAL ECONOMIC HARDSHIP ON THE NATIONAL ECONOMY. SECOND, IN THE EVENT THERE WERE A NATIONAL EMERGENCY, STRATEGIC DEFENSE NEEDS WOULD SURELY SUFFER. COUPLE THIS WITH THE FACT THAT THE

COLLAPSE IN OIL PRICES HAS VIRTUALLY SHUT DOWN EXPLORATION AND THE RESULTING ADDITION TO NEW DOMESTIC RESERVES, AND WE HAVE THE POSSIBLE MAKINGS OF EVEN MORE SERIOUS CONSEQUENCES FOR THE NATIONAL ECONOMY AND FOR NATIONAL DEFENSE.

IN MY JUDGMENT THE ONLY FEASIBLE RESPONSE IS THE IMPOSITION OF A FEE ON IMPORTED OIL. SUCH A FEE WOULD REDUCE THE COUNTRY'S DEPENDENCE ON IMPORTED OIL AND HELP TO SALVAGE A DOMESTIC INDUSTRY WHICH IS SO VITAL TO THE FUTURE OF THIS COUNTRY. AND YES, THIS LATTER REVITALIZATION WILL BE CRITICAL IF WE ARE TO BREATHE NEW LIFE INTO THIS STATE, CITY AND REGION. BUT REMEMBER, THE COST OF NOT DOING SO IS FAR GREATER IN THE LONG RUN THAN THOSE OF THE IMMEDIATELY VISIBLE SHORT RUN.

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The CHAIRMAN. Thank you very much for a very powerful statement, Mr. Fortier.

Now, finally, and I'm sorry that time, that the clock is running on us, I must ask two of our most outstanding witnesses, Dr. David Manuel who is Dean of the College of Business at the University of Southwestern Louisiana, and Dr. James Richardson who is with the Public Administration Institute of the College of Business Administration at Louisiana State University. Gentlemen, we have your written statements. We'd like for you summarize quickly the essence of them, and your full statement will, of course, be read by other members of the committee and by the Congress.

First of all, Dr. Manuel.

STATEMENT OF DR. DAVID P. MANUEL, UNIVERSITY OF SOUTHWESTERN LOUISIANA, LAFAYETTE, LA

Dr. MANUEL. Thank you, Senator. And thank you, Senator Domenici for being with us this morning.

The summary, really, of my statement which you have before you, and both Dr. Richardson and I have several visuals which we will not be using presumably because of just the few minutes left.

But the summary, primarily of my statement is that south Louisiana is extraordinarily dependent not merely on the oil and gas industry as a drilling exploration and development sector, but keep in mind the extensive amount of employment in fabrication, pipeline construction, and all of the associated types of employment, for instance from Representative Tauzin's district.

As an example, we have conservatively estimated that 40 percent of employment in coastal Louisiana Parishes is either directly or indirectly tied to the oil and gas industry. A minimum of 30 percent of employment in this city is directly and indirectly tied to the oil and gas industry.

The significance of that is that in Lafayette alone since 1981 better than 19,000 jobs have been lost in this city alone since 1981. That represents one-fifth of our employment base, having deteriorated in less than five years.

I think the final point in terms of importance is the impact that this has had on subsidiary industries that are no where nearly connected to the oil and gas industry. For example, in 1981 there were an average of 44 commercial building permits in the City of Lafayette issued per month. In 1986 that has averaged six per month. In 1981 there were an average of 122 residential building permits. And last year the average was 19 per month.

The critical nature of this is the loss of job, loss of income, and the subsequent loss of spending.

On the materials which you have that I have given you there is a figure which tracks seasonally adjusted retail sales for the City of Lafayette, and for this Parish. And our estimate is that since 1981 there has been a loss of $2 billion in retail sales in this city alone. That does not include all of south Louisiana and the coastal regions. Two billion, gentlemen; not million. Billion. In one city of approximately one hundred thousand people.

The CHAIRMAN. If I can get you to just say a word or two more, because we're due at 12:15.

Mr. **Manuel**. Certainly. The task I think is very clear, and it's the same as that of the gentleman of the private sector have given you. There needs to be a total redirection of energy policy.

Thank you. [Applause.]

[The prepared statement of Dr. Manuel follows:]

REGIONAL IMPACTS OF THE CURRENT OIL INDUSTRY DEPRESSION

by

David P. Manuel

Professor of Economics
and
Acting Dean
College of Business Administration
University of Southwestern Louisiana
Lafayette, LA

Testimony Before the

United States Senate
Energy and Natural Resources Committee

Lafayette, LA

February 9, 1987

Good morning; like the others presenting testimony this morning I would like to thank the Committee for giving me the opportunity to speak before you. Most of all, however, I would like to thank the members of the Committee for taking the time to travel to south Louisiana in order that they might get a firsthand view of the economic devastation caused by the truly dramatic decline in oil prices. The numbers are not pleasant; but the numbers are not what this is all about. The real impact has been on people and families. It has been on this country's and region's most valuable resource -- that of human potential. And it has been on the overall security of this nation.

My role this morning is to document for you the nature and extent of the economic dislocation on this region. To understand the reasons for the severity of the current decline, one should first have some knowledge of the economic structure of the region. Table 1 examines the percent distribution of employment by industry in the United States, Louisiana, Lafayette, and selected coastal parishes (counties).[1] Given that 71.0 percent of Louisiana's oil production occurs in the coastal parishes or offshore (including federal offshore) and 75.6 percent of the state's natural gas production occurs in the same areas, one should not be surprised to learn that there is a heavier concentration of energy-related employment in the southern portion of Louisiana when compared to other regions.[2] Due to this significant portion of energy resources having been discovered, developed, and produced in the southern region of the state, better than 10.0 percent of coastal parish employment is in the mining sector compared to almost fifteen percent in Lafayette.

Comparatively, only 1.2 percent of national employment is in the same sector while the relevant state ratio is 6.5 percent. Important differences exist within south Louisiana. Almost nine percent of coastal parish employment is involved in the actual extraction of oil and gas while in Lafayette, the percentage is 6.5 percent. On the other hand, almost twelve percent of Lafayette's employment is in the oil and gas field services sector compared to 6.3 percent in coastal parishes and only 3.7 percent statewide. Thus, the linkages between sub-industries under the umbrella of mining is different in various regions, but nevertheless, the result is a particularly broad impact on the entire southern half of Louisiana.

A further significant linkage in this region is in the manufacturing sector. While Louisiana does not approach the same level of manufacturing as that of the United States, neither do the southern and coastal regions. The key, however, is the distribution of manufacturing employment. The bulk of manufacturing in the coastal areas is concentrated in fabricated metal and structural steel fabrication, and transportation manufacturing. The concentration is clearly the result of offshore-related manufacture of drilling platforms, equipment manufacture, the building of pipelines to transport oil and gas produced in offshore waters, and the manufacture and repair of marine vessels used in exploration, development and servicing of offshore rigs.

The only other sector to exhibit significant differences from the state and nation is the transportation sector. Once again, almost fifteen percent of coastal employment and almost 9.0 percent of Lafayette's employment is in this sector, compared to six percent nationally. The major component here is water transportation employment, which accounts for 8.5 percent of coastal employment. Nationally the same sector's employment is only .2 percent of total employment. Thus, you can easily gather that coastal Louisiana has obvious extended ties to the oil and gas industry which I would conservatively put at responsible for 40.0 percent of employment; in the case of Lafayette, I would place the employment dependency ratio at approximately 30.0 percent.

Such a high dependency of this city and region on one industry has resulted in an extraordinarily high degree of cyclical volatility. Figure 1 documents the behavior of wellhead prices for domestically-produced crude oil for the period of 1980 - 1986. The extremely rapid increase in prices during 1980 was a continuation of the trend established in the late 1970's. Following a peak of $34.70 per barrel in early 1981, prices declined rather sharply in three stages before reaching a lengthy stable period in early 1983 at approximately $26 per barrel. This stability lasted almost two years until a two dollar drop ensued in late 1985; the subsequent stability lasted roughly one year. Beginning in late 1985 a truly precipitous decline began resulting in a 65.0 percent decline to approximately $9.50 per barrel. Never before in history have oil prices risen or declined so sharply in such a brief period of time. While my purpose today is not to explain why this occurred, one fact must be presented -- the decline in the demand for oil was certainly a factor; however, OPEC pricing behavior was definitely the major culprit. There is abundant evidence now in the United States that OPEC's use of limit pricing works extremely well to cause a deterioration in competition in the short-run and a weakening of reserve bases in the long-run.

The most obvious direct impact of rising and falling oil prices is on the number of wells drilled. Two important indicators of the amount of work occurring in the industry and of the effect that price expectations have on future activity are the number of drilling permits filed in the Department of Natural Resources and the number of rigs working. Figure 2 outlines the behavior of Louisiana drilling permits. In my opinion drilling permits are an excellent indicator of the industry's expectations of price behavior. If you examine the chart closely, you will detect a very gradual decline in permits filed from 1981 through mid-1983. (Recall that oil prices declined in this period in a stair-step fashion, not all at once.) Similarly, the long period of price stability (1983-1985) resulted in a rather sharp rise in permitting; given that drilling costs were declining, it is clear that the expectation was for higher prices, particularly if you keep in mind the long period of stability. The brief decline of prices in early 1985 followed by stability and finally followed by the most recent round of precipitous drops caused a wholesale fear of drilling. Coupled with the dramatic cuts in exploration budgets by the major firms, one has the makings of a catastrophe in the industry.

Indeed as Figure 3 attests, the number of working rigs in Louisiana peaked in late 1981 at 479. The decline in the number of rigs, after falling 38.0 percent, moderated in mid-1983. However, a more recent decline of 67.0 percent has followed since early 1985. By the most recent count, then, one-fourth of the rigs drilling in Louisiana in 1981 are drilling today. In other words, drilling activity in this state has dropped 77.0 percent in five years.

The impact of this price and drilling behavior has stunned this state, city, and region. Figure 4 presents seasonally adjusted employment data for Lafayette over the same years, 1980-1986. Total employment peaked at almost 89,000 in late 1981. While the decline has not been at a consistently negative rate, it has been serious. So much so, that seasonally adjusted employment now stands at about 70,000. In effect, then, total employment in this parish has declined 21.3 percent since 1981; we have lost 19,000 jobs! Approximately one-fifth of our employment base has evaporated!

As you would imagine, Lafayette's unemployment rate responded to these developments. After being in the 4.0 - 5.0 percent range for several years, it climbed rapidly beginning in early 1982 and quickly doubled to 10.0 percent in early 1983. A decline followed through mid-1984 (recall the increase in rig activity) only to begin rising again from its new trough of seven percent. The past year's extremely rapid drop in oil prices caused the seasonally adjusted rate to increase to over 16.0 percent. It is abundantly clear from the data that this rate is highly sensitive to the intensity of drilling in the state, as well as that occurring in the entire country.

Figure 5-A illustrates four unemployment rates for comparison purposes, those of the United States, Louisiana, Lafayette, and the coastal parishes mentioned earlier. While unemployment rates in Louisiana have exhibited considerable sensitivity to drilling activity,[3] rates in Lafayette and the coastal regions have shown even greater volatility.[4]

At present, Louisiana's rate is twice that of the nation; however, Lafayette's rate is two and one-half times that of the nation, and the state's coastal average is three times that of the United States.

The most tragic aspect of this phenomenon is the waste of human resources encountered and the excess capacity inflicted on what was a particularly vibrant industry. One final aspect needs to be brought to your attention. The depression in the oil and gas industry has impacted far more than just the people working in the industry. For example, never before in the history of this state have so many construction workers been unemployed. Commercial building permits (seasonally adjusted) have declined from a monthly average of 44 in 1981 in Lafayette to six per month in 1986. Similarly, residential permits averaged 122 per month in 1981 in Lafayette only to decline to an average of 19 in 1986.

The point I wish to make at this juncture is that spending has declined to levels at which sellers are barely covering operating expenses. Figure 6 details the behavior of Lafayette retail sales. Since late 1981, the data reveal that this city alone has experienced a loss of $2.0 billion in retail sales. The economic loss to this region then extends far beyond the confines of the oil and gas industry. Loss of retail sales is made further acute by the resulting pressure it has placed on city and parish governments.

The task before you is clear. There must be a re-evaluation of the direction this country will take in the area of energy policy. I fully recognize that the issues are extraordinarily complex, involving national and international concerns. Regardless of the stance you take, please remember what you have heard today and realize that a new policy direction will not merely benefit the oil and gas industry. It will positively impact hundreds-of-thousands of persons, who through no fault of their own, have been subjected to the vagaries of a market in which they have no power.

FOOTNOTES

[1] Cameron, Iberia, Lafourche, St. Mary, Terrebonne, and Vermilion.

[2] American Petroleum Institute, Basic Petroleum Data Book: Petroleum Industry Statistics. Washington: September, 1986; Louisiana Department of Natural Resources, Office of Conservation, Louisiana Annual Oil and Gas Report. Baton Rouge: annual; and, United States Department of the Interior, Minerals Management Service, Federal Offshore Statistics: 1984. Reston, VA: December, 1986.

[3] David P. Manuel, "Unemployment and Drilling Activity in Major Energy-Producing States," Journal of Energy and Development, 10(1): Autumn, 1984, pp. 45-62.

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6
________________ "The Effects of Higher Energy Prices on State Income Growth," Growth and Change, 13: (July, 1982), 26-37.

7
________________ "Higher Energy Prices and Resource Endowments in an Export Base Model Context," Review of Regional Studies, 12: (Spring, 1982), 32-41.

8
________________ "Long Run Implications of Offshore Energy Development," in Modelling, Planning, and Decisions in Energy Systems. M. H. Hamza (ed.), Anaheim: Acta Press, 1979, 113-118.

9
________________ "Unemployment and Drilling Activity in Major Energy-Producing States," Journal of Eenrgy and Development, 10(1): Autumn, 1984, 45-62.

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11
__________________ "Regional Consequences of High Energy Prices in the United States," Journal of Energy and Development, 1: (Spring, 1976), 213-239.

12

__________________ "Regional Employment Impacts of Rising Energy Prices," Labor Law Journal, 26: (August, 1975), 518-523.

13

__________________ "Rising Energy Prices and Regional Economic Development," Growth and Change, 8: (July, 1977), 2-7.

14

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Table 1

Percent of Total Employment by Industry and Region: 1984

SIC Number & Industry	U.S.	Louisiana	Lafayette	Coastal Parishes*
TOTAL	100.0	100.0	100.0	100.0
MINING	1.2	6.5	14.6	10.6
13 Oil & Gas Extraction	.6	5.3	6.5	8.8
131 Crude Oil & Natrl. Gas		1.6	.9	8.8
138 Oil & Gas Field Servs.		3.7	11.8	6.3
1381 Drilling Oil & Gas Wells		1.3	3.8	2.9
1389 Oil & Gas Field Servs. Not Elsewhere Classified		2.2	7.2	3.8
CONTRACT CONSTRUCTION	5.3	8.4	6.1	6.7
15 General Contractors	1.3	1.8	1.3	1.0
16 Heavy Construction	.9	2.2	1.7	2.9
MANUFACTURING	2.47	14.2	5.4	14.2
20 Food & Kindreds	1.8	1.6	1.4	2.6
28 Chemicals & Allieds	1.1	2.3	.2	.4
29 Petroleum Products	.2	1.0	.3	2.0
34 Fabricated Metals	1.9	1.0	.5	3.2
344 Fabricated Struc. Metals		.6	.3	2.8
35 Machinery, not Electcl.	2.7	.7	1.4	1.6
37 Transportation Equip.	2.2	1.7		3.8
TRANSPORTATION & PUB. UTL.	6.0	8.4	8.6	14.7
42 Trucking & Warehousng.	1.6	1.6	1.8	1.8
44 Water Transportation	.2	2.5	1.3	8.5
45 Air Transportation	.5	.6	2.0	1.3
WHOLESALE TRADE	6.9	7.2	9.2	6.8
50 Durable Goods	3.9	4.1	6.0	3.5
51 Nondurable Goods	2.7	2.9	3.3	2.8
RETAIL TRADE	20.6	22.5	23.2	22.1
FINANCE, INS, & REAL ESTATE	7.4	6.6	5.4	4.8
SERVICES	26.1	24.1	25.2	18.3

SOURCE: U. S. Department of Commerce, County Business Patterns, 1984. Washington: 1986.

LIST OF FIGURES AND THEIR SOURCES

Figure 1: Wellhead Oil Prices. (United States Department of Energy, Energy Information Administration. Monthly Energy Review. Washington: monthly.)

*Figure 2: Drilling Permits in Louisiana. (Louisiana Department of Natural Resources, Office of Conservation, monthly.)

*Figure 3: Active Rigs in Louisiana. (Hughes Tool Company, Houston, Texas, weekly.)

*Figure 4: Lafayette Employment. (Louisiana Department of Labor, Office of Employment Security, Labor Market Information. Baton Rouge: monthly.)

*Figure 5: Unemployment Rate Lafayette. (Louisiana Department of Labor, Office of Employment Security, Labor Market Information. Baton Rouge: monthly.)

*Figure 5A: Unemployment by Region. (Louisiana Department of Labor, Office of Employment Security, Labor Market Information. Baton Rouge: monthly.)

*Figure 6: Retail Sales Lafayette. (Lafayette Parish School Board, Sales Tax Division, monthly computer printout.)

*Seasonally adjusted by the College of Business Administration, University of Southwestern Louisiana using X-11 ARIMA.

FIGURE 1

WELLHEAD OIL PRICES

(IN CURRENT US DOLLAR)

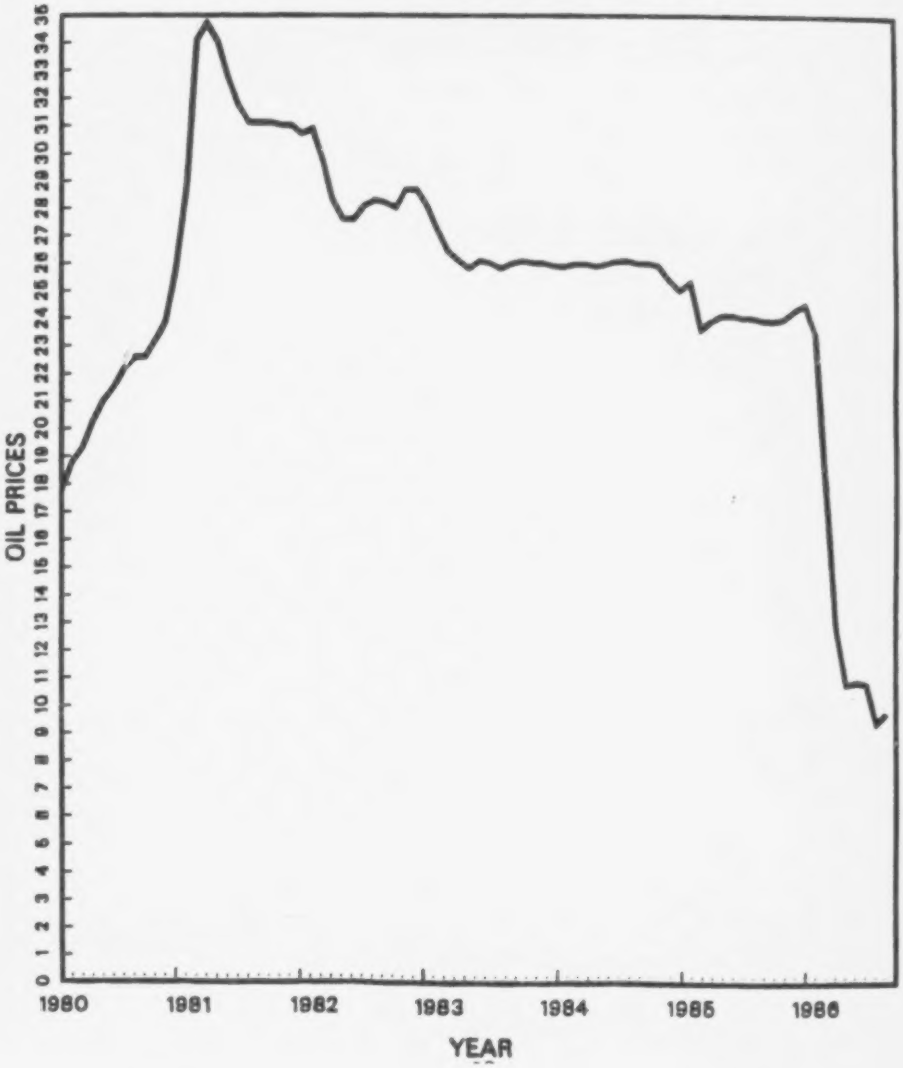


FIGURE 2
DRILLING PERMITS IN LOUISIANA
(SEASONALLY ADJUSTED)

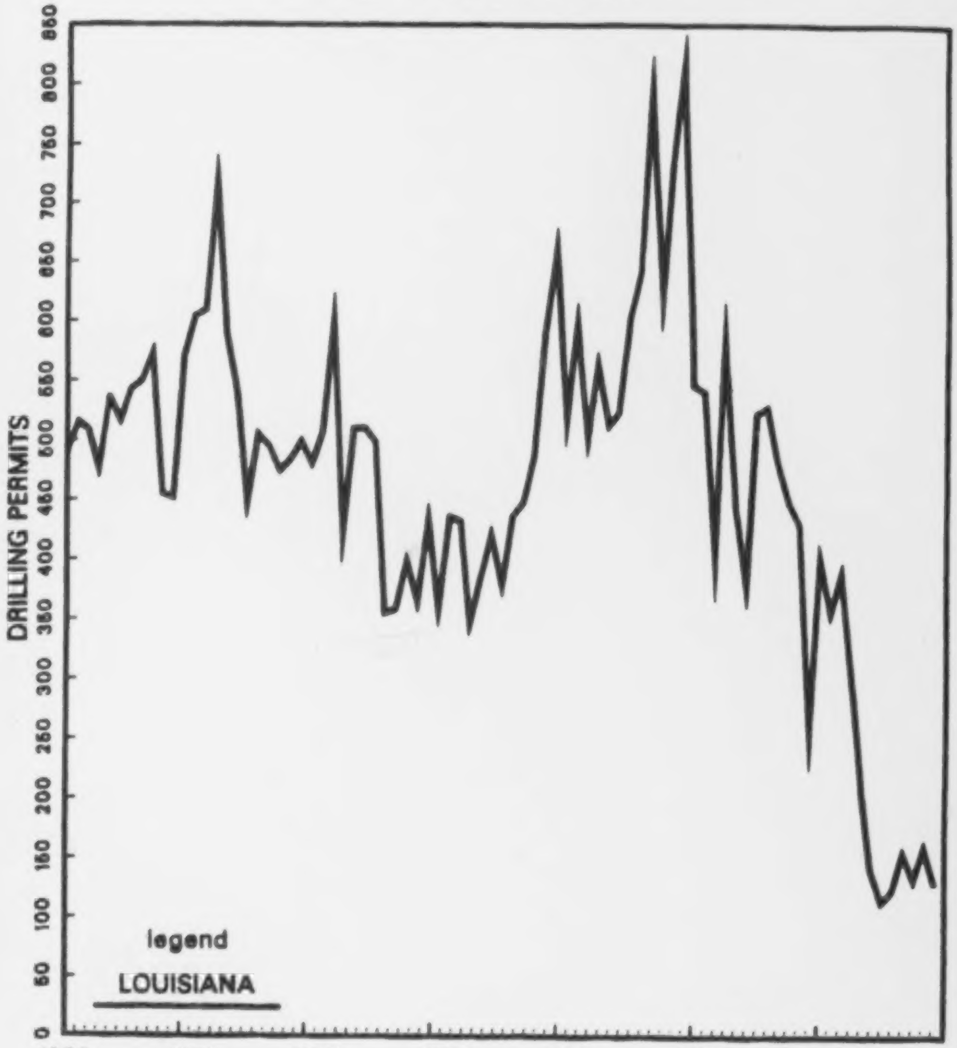


FIGURE 3

ACTIVE RIGS IN LOUISIANA

(SEASONALLY ADJUSTED)

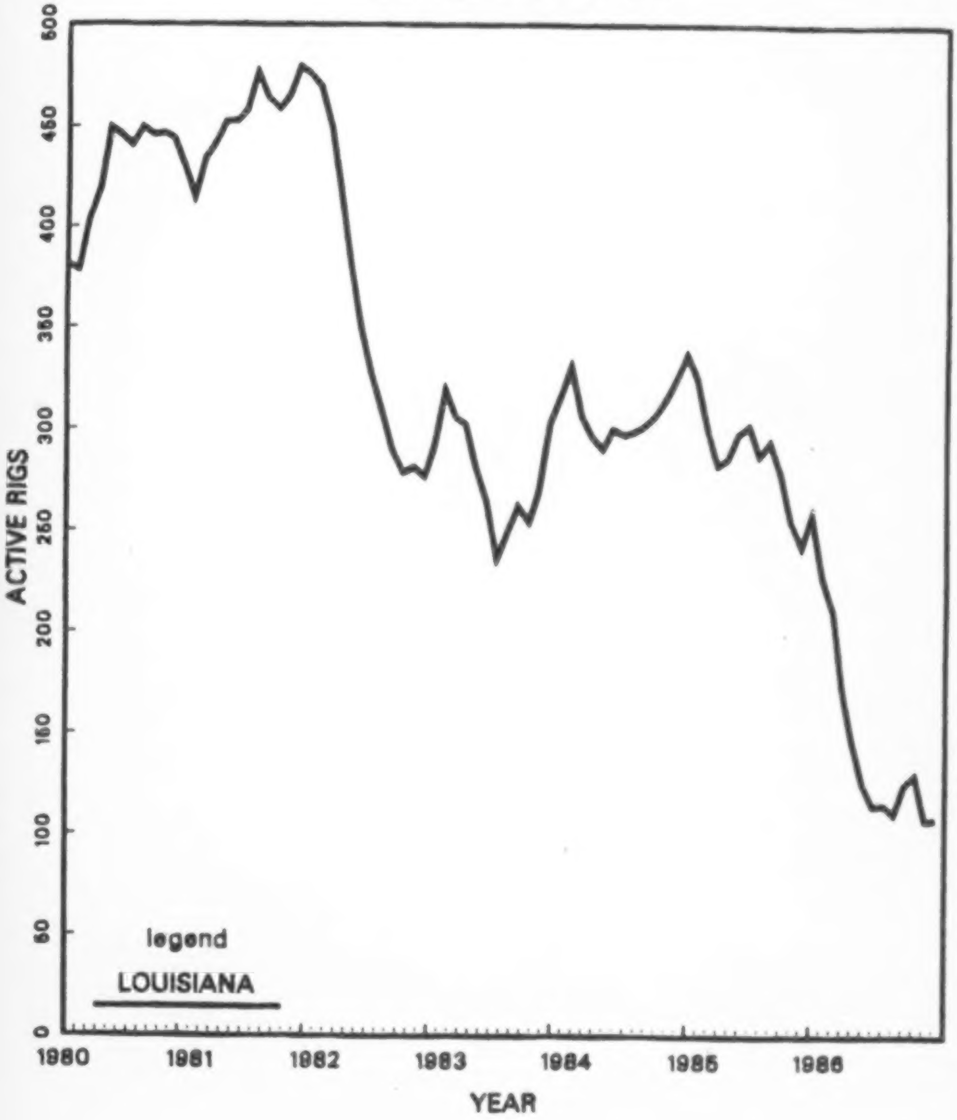


FIGURE 4
LAFAYETTE EMPLOYMENT
(SEASONALLY ADJUSTED)

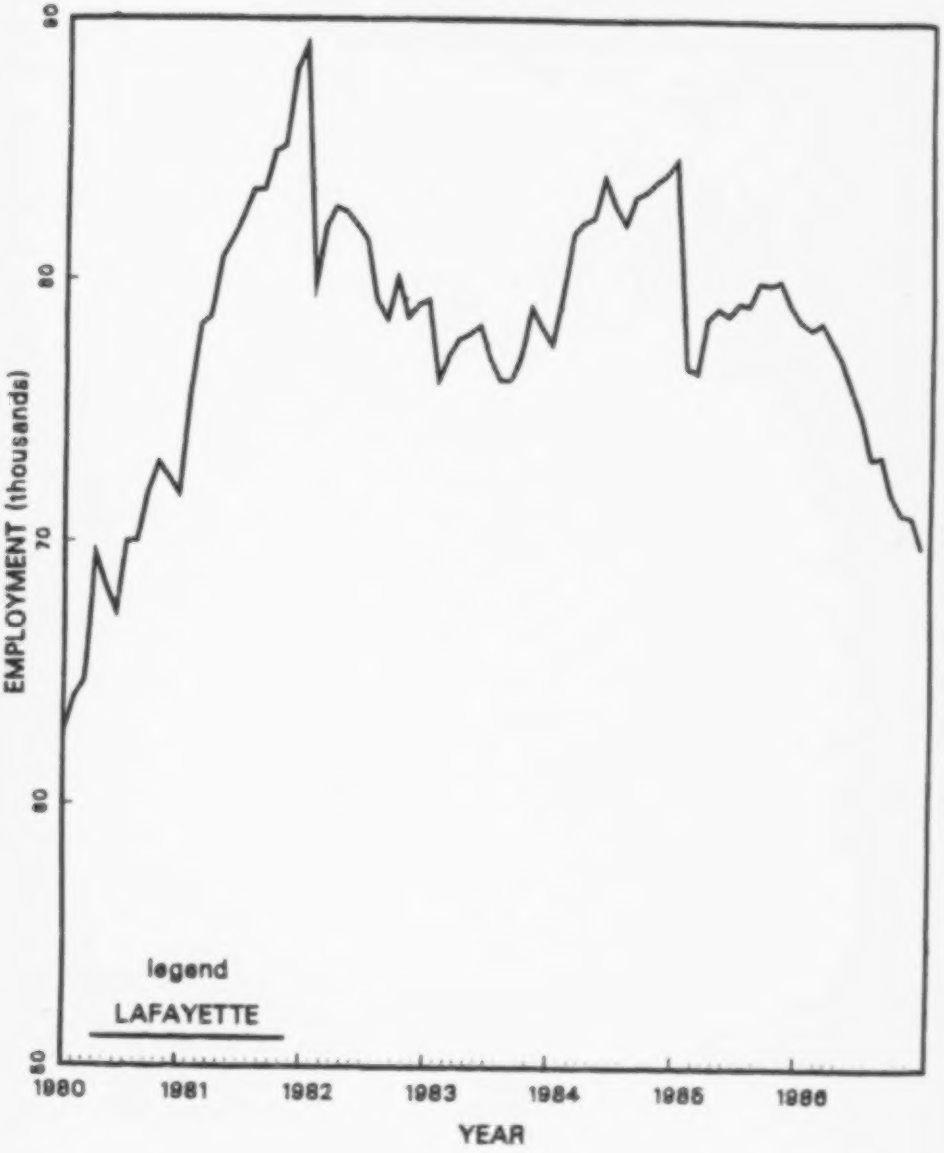


FIGURE 5
UNEMPLOYMENT RATE LAFAYETTE
(SEASONALLY ADJUSTED)

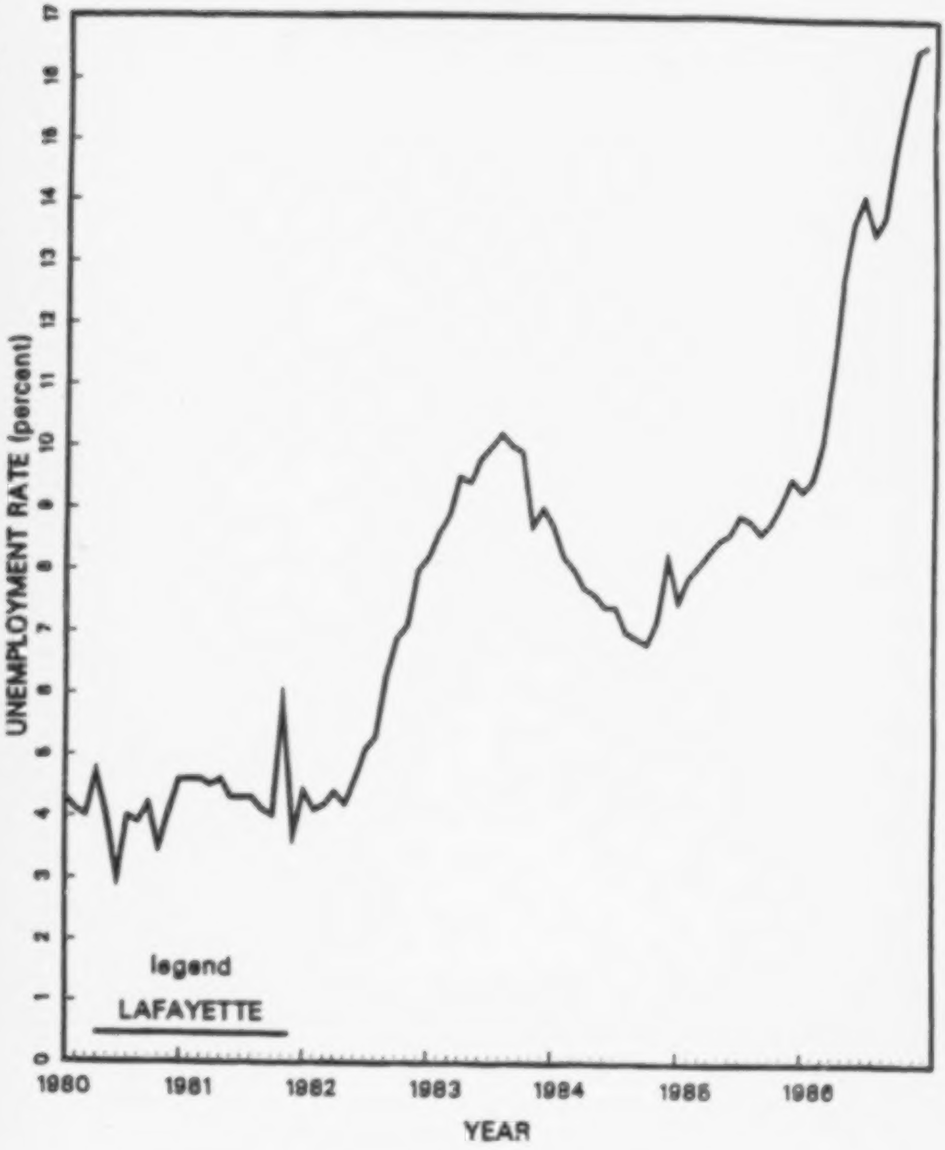


FIGURE 5A
UNEMPLOYMENT RATE BY REGION
(SEASONALLY ADJUSTED)

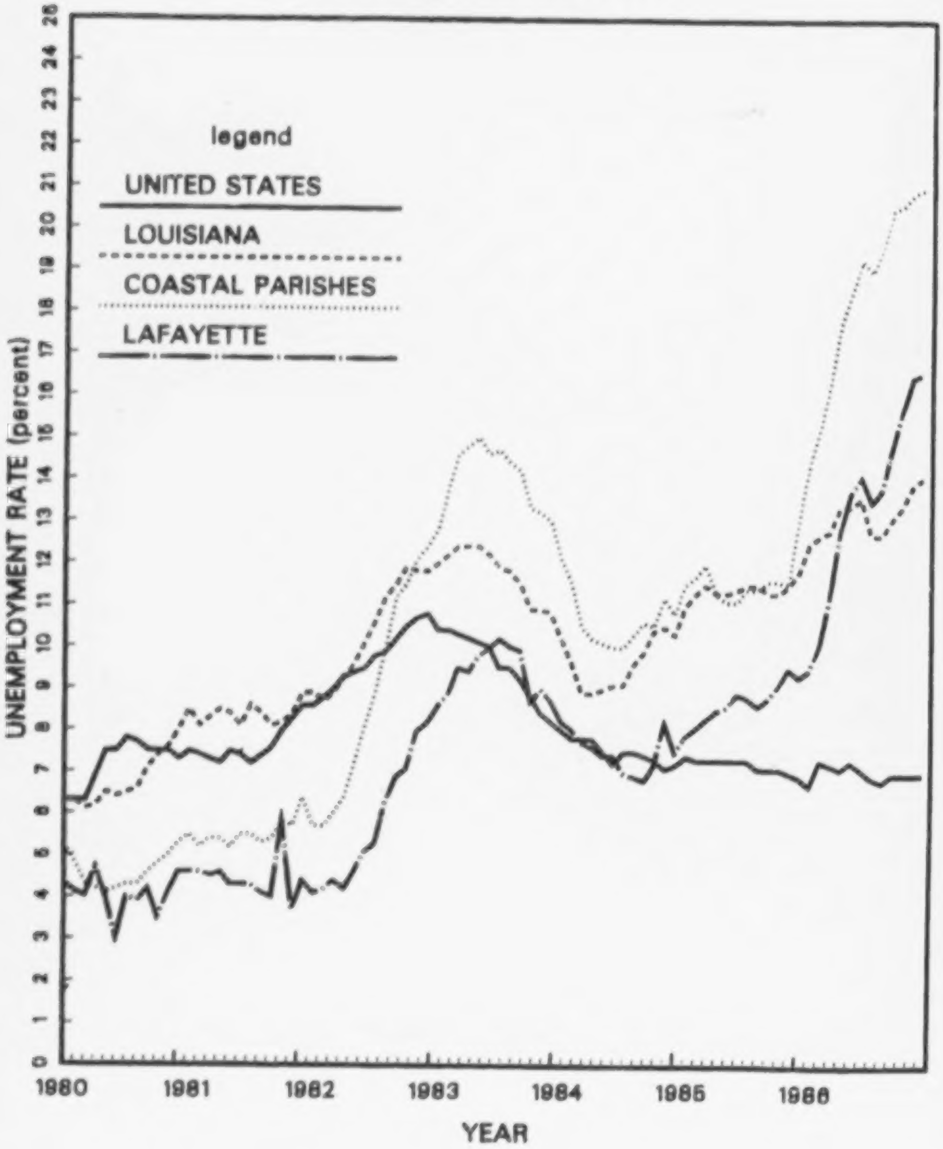
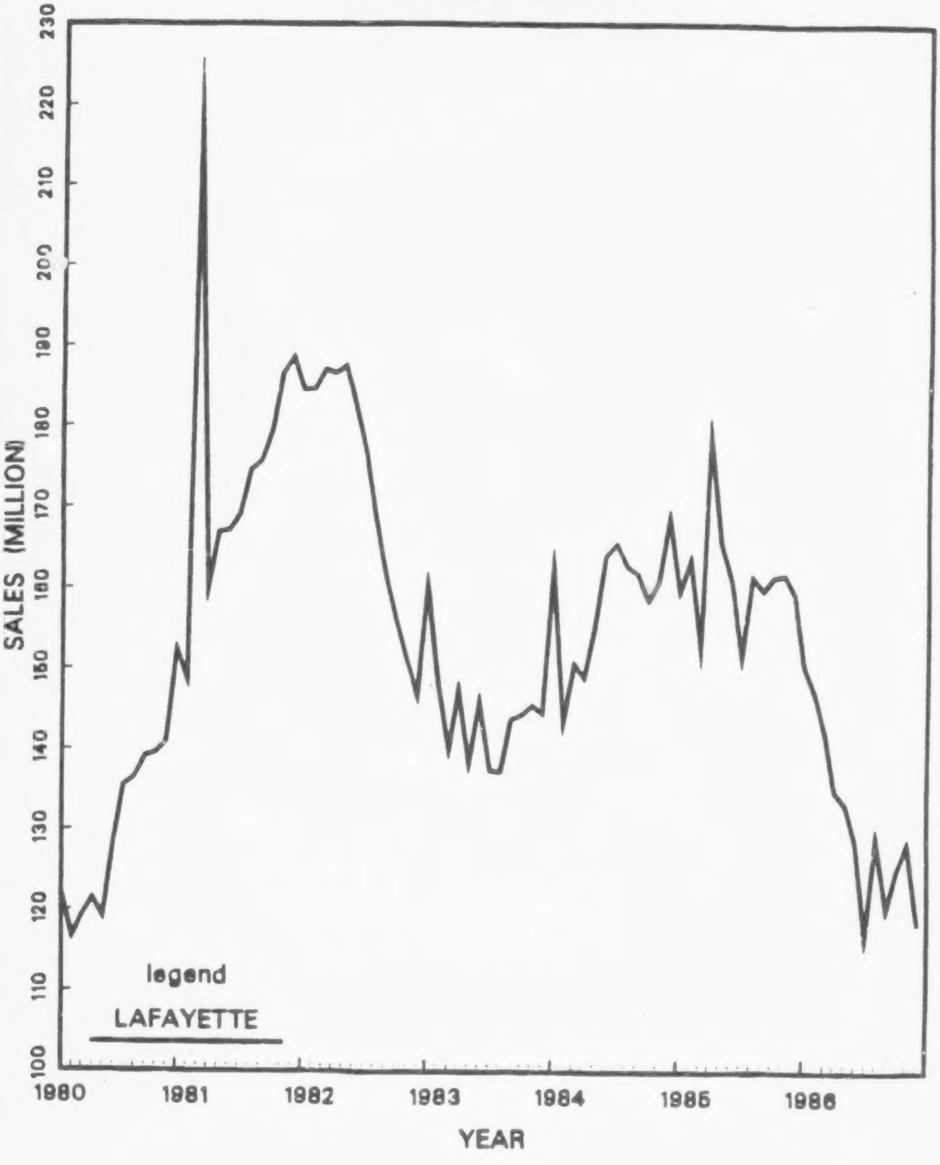


FIGURE 6
RETAIL SALES LAFAYETTE
(SEASONALLY ADJUSTED)



The CHAIRMAN. Thank you very much for an excellent statement.

Finally, Dr. Richardson.

STATEMENT OF DR. JAMES A. RICHARDSON, LOUISIANA STATE UNIVERSITY, BATON ROUGE, LA

Dr. RICHARDSON. In twenty-five words of less. [Laughter.]

The gist of my statement that you'll read for the Committee is basically that much of the instability in the Louisiana economy, as referred to by Governor Edwards, is really the result of unstable, uncertain, shifting energy policy at the Federal level.

During the 1970's the policy of the U.S. was to restrict production and encourage consumption of energy. We did that by oil price controls at that time.

During that time, even after that was being lifted suddenly the Louisiana economy went wild in terms of development. Employment rose dramatically in the 1970's. Mining employment in Louisiana doubled during the 1970's. Employment in construction went up by almost 90 percent.

We found that in the 1970's as those production restrictions were released that the oil and gas revenues for the state rose by 300 percent from 1973 to 1981.

What we've found now since that time though, during the 1980's we've gone just the opposite, because what has really happened is in 1981 the price of oil relative to other prices in 1976 was six times higher. In 1986 the price of oil is cheaper than all other prices compared to 1976 as the base year.

So, well, what has happened during the 1980's is that the state has lost since 1981 almost 150,000 jobs. In the oil and gas industry we have lost 42,000 jobs since 1981.

In 1986 alone we lost 22,000 jobs in that particular industry. So, we've gone from 100,000 people working in the oil and gas industry in Louisiana in 1981 to less than 60,000 right now.

I think what it really suggests as we look near the future, we do need to have a well-defined, stable energy policy that thinks not only about 1987, 1988, but also thinks about our country in 1990 and 1995.

Thank you, sir.

[The prepared statement of Dr. Richardson follows:]

Testimony for United States Senate
Committee on Energy and Natural Resources

February 9, 1987
Lafayette, LA

James A. Richardson
Professor of Economics
Director, Public Administration Institute
Louisiana State University
Baton Rouge, LA 70803

Testimony for United States Senate
Committee on Energy and Natural Resources

I want to thank Senator Johnston and members of the United States Senate Committee on Energy for inviting me to appear before this hearing. I will outline the economic conditions confronting Louisiana in 1987, but will also perhaps add some perspective to the factors which led to the current economic depression.

Oil Price Cycles

Variations in oil prices are by this time well-known, but it is against this background that the boom of the 1970's and the bust of the 1980's must be explained. In Figure 1, oil prices are charted, while in Table 1, oil prices compared to other prices are listed. In 1981 oil prices had grown almost six times as fast as other prices since 1976. The Louisiana prosperity in the 1970's and early 1980's can be primarily related to the price of oil. Of course, the steady slide from 1981 to 1985 turning into a percipitous drop in 1986 is also primarily related to the price of oil . The Louisiana economy in the 1970's was propelled upwards by false signals from the market place, and now in 1986 individuals may be forced to act on the basis of false signals from the market place.

The Booming Seventies

The growth in the Louisiana economy in the 1970's was unprecedented. Just a few facts will illustrate this point. From 1970 to 1980 employment growth by sector was:

Construction	88 percent
Mining	97 percent
Chemicals	43 percent
Transportation	42 percent
Total, Louisiana	40 percent
Total, U.S.	25 percent

Oil and gas employment doubled in ten years in Louisiana, and construction employment almost doubled.

Rig activity offshore rose from 84 in 1973 to a peak of 256 in 1981, as illustrated in Figure 2. The number of seismic crews doubled from 1973 to 1981.

State revenues from taxes on oil and natural gas and royalties and bonuses on state-owned land jumped from $400 million in 1973 to $1,600 in 1982, an increase of 300 percent in less than ten years. The state raised its tax rate in December 1973 on oil and natural gas, but did not raise the rates thereafter. This is illustrated in Figure 3.

By the end of the of 1970's, the Louisiana economy had responded enthusiastically to the high relative price of oil and unfortunately had also accepted the fact that these high prices were permanent. In fact, the general expectation was that prices would go even higher.

The Hard Lessons of the 1980's

Figure 1 and Table 1 illustrate all too clearly that high oil prices were not permanent. In 1986 oil prices are 67 percent higher than they were in 1976 on average. General prices are 75 percent higher than general prices in 1976. Oil was less expensive at the end of 1986, relative to other goods and services, than it was in 1976.

Such an adjustment in oil prices led to an equally dramatic adjustment in oil and gas activity, state employment, and state revenues. From Figure 2, offshore rig activity edged downwards from 1982 to 1985, but still averaging well above the rig activity in the 1974 to 1978 period. In 1986 rig activity collapsed.

Employment followed a similar trend, as illustrated in Table 2 and Figure 4. Oil and gas employment fell from over 100,000 persons employed in 1981 to around 75,000 to 80,000 persons employed in 1983-1985. By December of 1986, oil and gas employment had been reduced to less than 58,000 persons.

State total employment peaked in 1981 at 1,639,000. The state, relative to 1981, lost 70,000 jobs by 1982, 71,000 by 1983, 40,000 by 1984, and 54,000 jobs by 1985. But, from 1981 to 1986 the State lost 148,000 jobs, almost ten percent of the total employment in 1981.

In 1984 offshore activity directly and indirectly generated over 105,000 jobs in south Louisiana. By 1986 offshore activity directly and indirectly generated only around 58,000 jobs in south Louisiana.

State revenues also responded. Mineral revenues fell from $1,600 million in fiscal 1982 to an estimated $730 million in fiscal 1987, a 55 percent reduction or almost a $1 billion reduction with a state general fund that is approximately $4 billion.

The reaction of the market place has been swift. Low oil prices have forced the new and the old, the established and the new entrepreneur to reconsider their investments and continued activity. Again, it may well be a forced reaction to what is most probably a false price - that is, a low price that cannot and will not be sustained over the long haul.

Looking to the Future

In 1980 and 1981 the state of Louisiana was talking about its embarrassment of riches. Everyone, from oil and gas operator to landowner to banker to public official and to academic observers, had convinced themselves that the boom would never end. But few people took the time to analyze the boom. The boom was artificial - it was unsustainable - it was a by-product of poorly conceived federal energy policies of the past. In part, the quick run-up in prices could be related to past misguided federal energy policies that restricted efforts to provide energy and supported efforts to consume it. Individuals, of course, are ultimately responsible for their economic decisions and those who chose to invest in drilling in 1981, 1982 and so on and those who chose to pursue oilfield work are now paying the price. But many of their decisions were based on prices that were totally distorted by government policies. In that sense, these citizens have a legitimate grievance against the government.

Now, however, the issue is how to deal with what is, in my judgment, an arbitrarily low price of oil. Businesses, banks, and citizens are once again making decisions based on false prices. This time the decision is to get out of the oil and gas business, reduce drilling, and find alternative employment. Businesses may be forced to overreact temporarily to the low price of oil and natural gas. In the long-run the oil and gas industry will respond to sustainable market signals. The issue is currently one of survival in the short-run so that we will be around to experience the long-run.

In this context the federal government has a role to play, but must be careful not to resort to policies that will set the oil and gas industry and the nation up for another boom and bust exercise. Federal policy must also take a long-run perspective because we should be concerned about the viability of the oil and gas industry in 1995 and national security in 1995, just as we are in 1987.

FIGURE 1

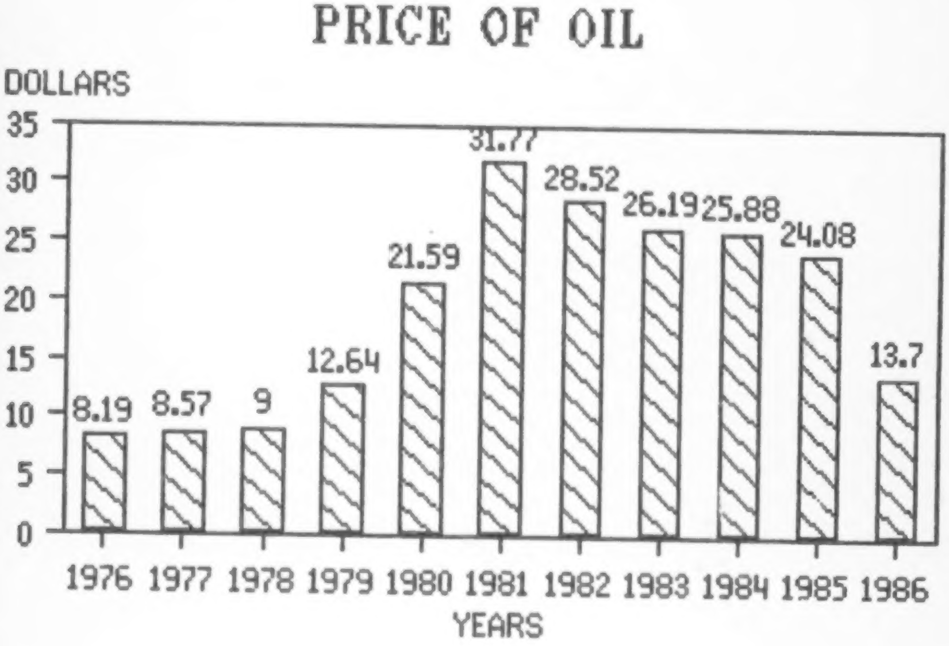
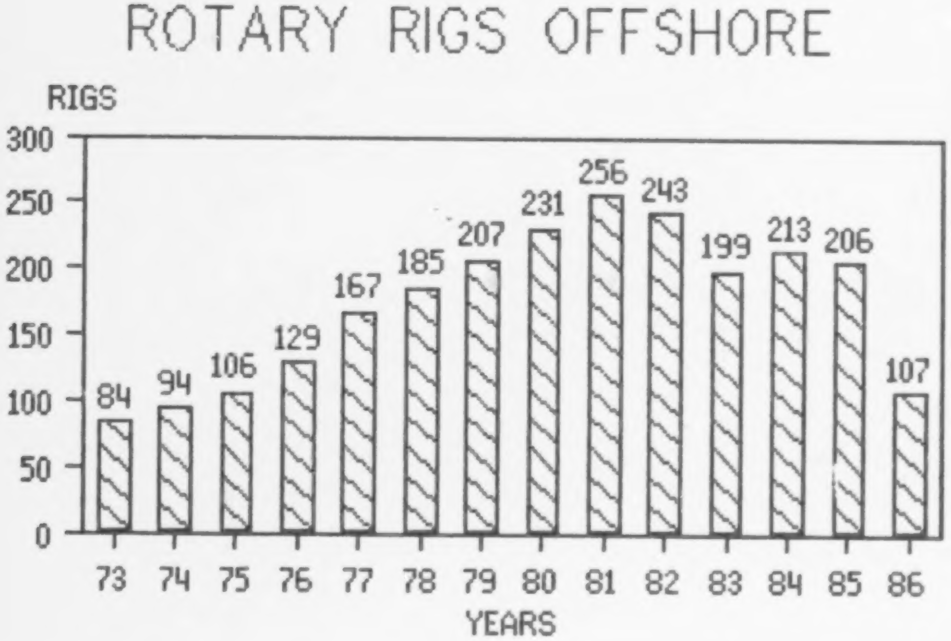
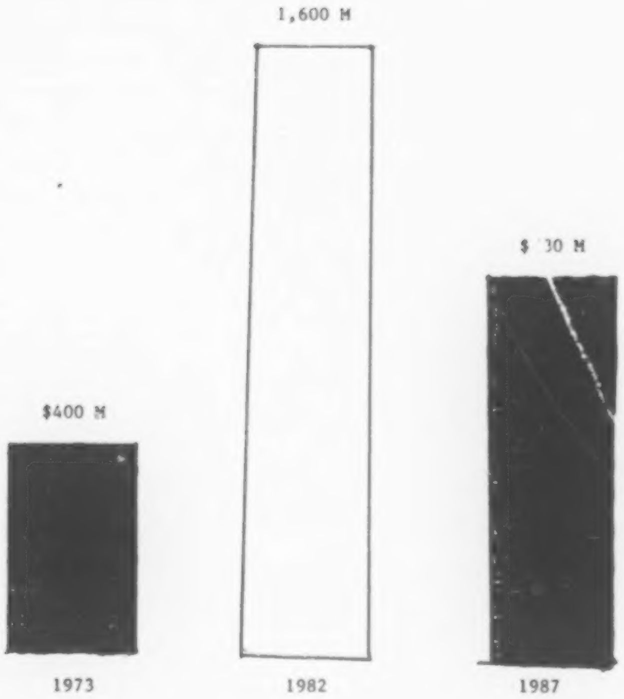

PRICE OF OIL
DOLLARS
35
30
25
20
15
10
5
0
8.19
8.57
9
12.64
21.59
31.77
28.52
26.19
25.88
24.08
13.7
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
YEARS

FIGURE 2


ROTARY RIGS OFFSHORE
RIGS
300
250
200
150
100
50
0
84
94
106
129
167
185
207
231
256
243
199
213
206
107
73
74
75
76
77
78
79
80
81
82
83
84
85
86
YEARS

FIGURE



Oil/Gas Revenues

FIGURE 4

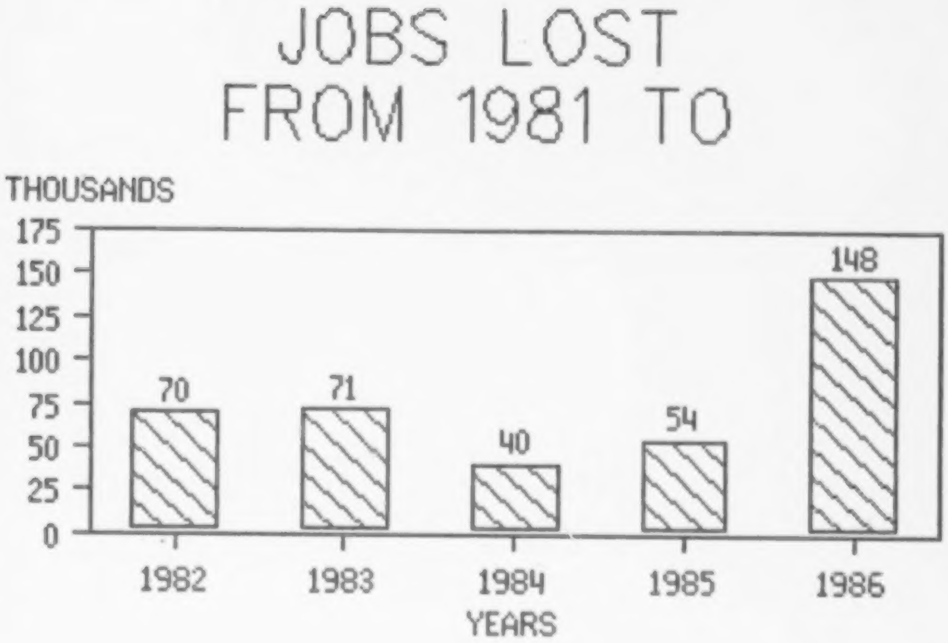

JOBS LOST
FROM 1981 TO
THOUSANDS
175
150
125
100
75
50
25
0
70
71
40
54
148
1982
1983
1984
1985
1986
YEARS

TABLE 1

GENERAL PRICE INCREASES AND OIL PRICE INCREASES FROM 1976 TO SELECTED YEARS (In Percent)

	Percentage Increase In	
Period	Oil Prices	Consumer Price Index
1976 to 1981	287.9%	50.6%
1976 to 1982	248.2%	56.8%
1976 to 1983	219.8%	60.3%
1976 to 1984	215.9%	65.8%
1976 to 1985	194.0%	72.3%
1976 to 1986	67.3%	75.1%

SOURCE: Table 1, Economic Report of the President, 1985, and Federal Reserve Bulletin, October, 1986.

TABLE 2

LOUISIANA QUARTERLY EMPLOYMENT IN SELECTED INDUSTRIES 1973I - 1986III
(in thousands)

Quarter	Nonagricultural Employment	Oil and Gas Employment	Manufacturing Of Transportation Equipment
1973I	1,142	46.6	21.2
1973II	1,164	46.4	21.7
1973III	1,192	47.7	21.6
1973IV	1,206	48.2	21.6
1974I	1,191	47.5	21.0
1974II	1,216	49.3	20.7
1974III	1,237	51.0	20.0
1974IV	1,240	51.8	19.3
1975I	1,217	52.0	20.3
1975II	1,231	53.8	21.2
1975III	1,262	56.3	21.8
1975IV	1,286	57.3	21.8
1976I	1,282	57.5	21.6
1976II	1,311	57.8	21.8
1976III	1,324	59.0	21.6
1976IV	1,341	58.8	21.0
1977I	1,318	60.2	21.4
1977II	1,368	63.2	22.4
1977III	1,378	66.0	22.0
1977IV	1,395	66.6	22.4
1978I	1,403	67.0	22.1
1978II	1,458	69.2	22.9
1978III	1,488	72.2	23.7
1978IV	1,506	72.1	24.3
1979I	1,479	71.4	25.3
1979II	1,510	73.6	26.0
1979III	1,511	75.5	25.3
1979IV	1,569	78.8	26.1
1980I	1,541	79.8	27.6
1980II	1,571	84.2	27.9
1980III	1,587	88.3	28.1
1980IV	1,617	89.1	28.7
1981I	1,593	89.4	29.0
1981II	1,629	93.6	30.0
1981III	1,641	98.2	31.2
1981IV	1,659	100.4	31.5
1982I	1,622	100.4	29.6
1982II	1,624	95.5	27.0
1982III	1,593	89.0	24.7
1982IV	1,589	84.4	23.6
1983I	1,549	80.8	21.9
1983II	1,562	76.8	20.4
1983III	1,561	75.6	21.3
1983IV	1,588	76.8	20.8
1984I	1,569	77.4	20.4
1984II	1,608	77.7	21.4
1984III	1,609	78.5	21.4
1984IV	1,619	80.6	21.6
1985I	1,587	80.2	21.9
1985II	1,603	78.5	21.9
1985III	1,595	78.2	20.8
1985IV	1,605	77.2	19.9
1986I	1,572	72.3	19.9
1986II	1,540	59.3	19.7
1986III	1,511	55.2	19.6

SOURCE: *Louisiana Labor Markets*, various issues.

The Oil and Gas Industry
In Louisiana

Testimony for

United States Senate

Committee on Energy and Natural Resources
Field Hearings

February 9, 1987
Lafayette, LA

By

James A. Richardson
Professor of Economics
Director, Public Administration Institute
Louisiana State University
Baton Rouge, LA 70803

The Oil and Gas Industry in Louisiana

I. Introduction

Oil and gas activity can be measured in a number of ways, including exploration activities as typified by seismic crews engaged in exploration; development activities as represented by rigs in operation, wells completed, and footage drilled; exploration, development, and production as indicated by oil and gas employment. These activities are all motivated by the price of oil and natural gas, as well as other variables such as cost considerations and general economic conditions. However, price stands out as the major factor to be considered, especially because of its potential volatility.

The nominal U.S. average price of crude oil and natural gas is presented in Table 1, from 1976 through 1986. The price of oil rose from $8.19 per barrel in 1976 to a peak of $31.77 in 1981. This rapid escalation in prices resulted from (1) the lack of oil production capabilities in non-OPEC countries and non-Communist countries in the late 1970's, (2) a tendency for the demand for oil-related products to grow, and (3) the gradual deregulation of domestic oil prices starting in 1979 and being completed in February, 1981.

Natural gas prices also rose from an average of 58 cents per thousand cubic feet (MCF) in 1976 to almost $2.00 per MCF in 1981 and finally peaking at $2.66 per MCF in 1984. Some natural gas prices rose much more than these averages due to the complex classification system and regulation/deregulation implications of the Natural Gas Policy Act of 1978.

TABLE 1

NOMINAL U.S. AVERAGE WELL-HEAD PRICE
OF CRUDE AND NATURAL GAS

Year	Crude ($ Per Barrel)	Natural Gas ($ Per MCF)
1976	$ 8.19	$ 0.58
1977	8.57	0.79
1978	9.00	0.91
1979	12.64	1.18
1980	21.59	1.59
1981	31.77	1.98
1982	28.52	2.46
1983	26.19	2.59
1984	25.88	2.66
1985	24.08	2.53
1986	13.70*	1.97**

* Average for January-July.
** Average for January-June.
SOURCE: Monthly Energy Review.

The change in oil prices relative to average prices of all commodities is shown in Table 2. Oil prices had risen by almost 300 percent from 1976 to 1981, while the Consumer Price Index had only risen by 50.6 percent. Even after oil prices began to decline in 1982, oil prices relative to other prices were still high by 1976 standards. That is, in 1984 oil prices were 215.9 percent higher than 1976 oil prices, while the 1984 Consumer Price Index was only 65.8 percent higher than the 1976 Consumer Price Index. By 1986, oil prices had increased by only 67.3 percent over 1976 while the Consumer Price Index had increased by almost 75 percent. Oil prices in 1986 are lower than average prices for other commodities relative to 1976 prices.

TABLE 2

GENERAL PRICE INCREASES AND OIL PRICE INCREASES
FROM 1976 TO SELECTED YEARS
(In Percent)

	Percentage Increase In	
Period	Oil Prices	Consumer Price Index
1976 to 1981	287.9%	50.6%
1976 to 1982	248.2%	56.8%
1976 to 1983	219.8%	60.3%
1976 to 1984	215.9%	65.8%
1976 to 1985	194.0%	72.3%
1976 to 1986	67.3%	75.1%

SOURCE: Table 1, Economic Report of the President, 1985, and Federal Reserve Bulletin, October, 1986.

II. Oil and Gas Employment in Louisiana

Employment activity is a very reliable barometer of overall economic trends. Total non-agricultural wage and salary employment in Louisiana, oil and gas employment in Louisiana, and employment in the manufacturing of transportation equipment, including seagoing vessels, in Louisiana are presented in Table 3. These data are presented on a quarterly basis from 1973 I through 1986 III. Quarterly data provide a glimpse as to when a turning point occurs within the year. Oil and gas employment peaked in the fourth quarter of 1981 and first quarter of 1982, and then declined steadily until about the second quarter of 1983. From mid-1983 to the end of 1985 oil and gas employment in Louisiana was relatively stable, at between 75,000 to 80,000 persons gainfully employed. This stable employment level still represented a 20 percent decline from the 1981 peak. Employment dropped by 5,000 in the first quarter of 1986 and by an additional 13,000 jobs in the second quarter of 1986 and then an additional 4,000 jobs in the third quarter of 1986. Oil and gas employment includes oil and gas field services employees. In total, 22,000 jobs were lost directly in oil and gas extraction in the first nine months of 1986.

Total Louisiana employment acted much as oil and gas employment. Total employment fell by almost 95,000 jobs in 1986. Employment in Louisiana had declined prior to 1986, but during 1986 the decline accelerated dramatically. For example,

FROM	JOBS LOST
1981.04 to 1982.04	70,000
1981.04 to 1983.04	71,000
1981.04 to 1984.04	40,000
1981.04 to 1985.04	54,000
1981.04 to 1986.03	148,000.

TABLE 3
LOUISIANA QUARTERLY EMPLOYMENT IN SELECTED INDUSTRIES 1973I - 1986III
(in thousands)

Quarter	Nonagricultural Employment	Oil and Gas Employment	Manufacturing Of Transportation Equipment
1973I	1,142	46.6	21.2
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1976I	1,282	57.5	21.6
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1976III	1,324	59.0	21.6
1976IV	1,341	58.8	21.0
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1977III	1,378	66.0	22.0
1977IV	1,395	66.6	22.4
1978I	1,403	67.0	22.1
1978II	1,458	69.2	22.9
1978III	1,488	72.2	23.7
1978IV	1,506	72.1	24.3
1979I	1,479	71.4	25.3
1979II	1,510	73.6	26.0
1979III	1,511	75.5	25.3
1979IV	1,569	78.8	26.1
1980I	1,541	79.8	27.6
1980II	1,571	84.2	27.9
1980III	1,587	88.3	28.1
1980IV	1,617	89.1	28.7
1981I	1,593	89.4	29.0
1981II	1,629	93.6	30.0
1981III	1,641	98.2	31.2
1981IV	1,659	100.4	31.5
1982I	1,622	100.4	29.6
1982II	1,624	95.5	27.0
1982III	1,593	89.0	24.7
1982IV	1,589	84.4	23.6
1983I	1,549	80.8	21.9
1983II	1,562	76.8	20.4
1983III	1,561	75.6	21.3
1983IV	1,588	76.8	20.8
1984I	1,569	77.4	20.4
1984II	1,608	77.7	21.4
1984III	1,609	78.5	21.4
1984IV	1,619	80.6	21.6
1985I	1,587	80.2	21.9
1985II	1,603	78.5	21.9
1985III	1,595	78.2	20.8
1985IV	1,605	77.2	19.9
1986I	1,572	72.3	19.9
1986II	1,540	59.3	19.7
1986III	1,511	55.2	19.6

SOURCE: I iana Labor Markets, various issues.

Employment in the manufacturing of transportation equipment fell dramatically from a peak of 31,500 in the fourth quarter of 1981 to less than 20,000 jobs in 1986. Employment in this sector had declined to about 20,000 jobs by 1983. Employment associated with the production of ships and vessels are included in this manufacturing sector.

III. Offshore Activity

Offshore oil and gas production, off the coast of Louisiana, represents almost 90 percent of all U.S. offshore production. This offshore production also overwhelms the production within the natural boundaries of Louisiana. Finally, the offshore oil and gas industry has a considerable economic impact on the state of Louisiana since coastal Louisiana anchors many of the companies involved in offshore activities.

Offshore oil and gas activity became a major, if not the major industry, along the coast of Louisiana, from New Orleans to Lake Charles. In 1984 the Louisiana offshore oil and gas industry spent $8.75 billion on contract services, materials, and products for operations in the Gulf of Mexico. Offshore oil and gas operators and producers in 1984 directly employed 21,847 persons with a direct payroll of $777 million.

The offshore oil and gas industry while very large in magnitude, is also quite volatile. In 1984 federal offshore oil and gas activity supported directly and indirectly over 105,000 jobs in Louisiana, while by 1986 the number of jobs supported directly and indirectly by the federal offshore oil and gas activity was only slightly over 58,000 jobs.

For these reasons, it is instructive to examine offshore exploration and development activity. The price of oil, natural gas, or any commodity guides its development and production. In Table 4 offshore oil and gas resource development is illustrated by seismic crews engaged in offshore exploration and rotary rigs in operation. Seismic crews peaked in 1982 at 57 and then averaged 47 per year, 1983-85. In 1986 seismic crews slipped to 25. Rig activity followed the same pattern, peaking in 1981 with 256 rigs in operation in offshore waters, then slipping to 243 in 1982. For 1983-85 active rigs averaged 206 per year, before declining dramatically to just over 100 rigs in operation in 1986. The years, 1983-85 suggests a slippage in rig activity from 1981, but not a collapse. The precipitous decline in 1986 can be called a collapse.

Wells drilled and footage drilled in Louisiana offshore waters from 1979 to 1984 suggests a slightly different story as indicated in Table 5. Total wells drilled and footage drilled in Louisiana offshore waters peaked in 1984. This activity reflects the relative stability in oil prices from late 1982 through 1984. The price of oil had settled at approximately $25 per barrel. Unfortunately, perfectly comparable data for 1985 and 1986 do not exist for wells drilled and footage drilled. The implications of the price of oil remaining relatively stable through January 1986 and then the price of oil plunging quickly toward the $10 per barrel level cannot be verified with respect to wells and footage drilled.

TABLE 4

OFFSHORE OIL AND GAS RESOURCE DEVELOPMENT SEISMIC CREWS AND RIG ACTIVITY

Year	Seismic Crews Engaged In Exploration Offshore	Rotary Rigs In Operation Offshore
1973	23	84
1974	31	94
1975	30	106
1976	26	129
1977	27	167
1978	25	185
1979	30	207
1980	37	231
1981	44	256
1982	57	243
1983	47	199
1984	49	213
1985	45	206
1986	25*	107*

* Average of January-August.
** Average of January-September.
SOURCE: Monthly Energy Review.

TABLE 5

WELLS DRILLED AND FOOTAGE DRILLED IN LOUISIANA OFFSHORE WATERS, 1979-1984*

	Wells		Footage (Thousand Feet)	
Year	Total	Average Per Month	Total	Average Per Month
1979	671	56	5,588	549
1980	641	53	6,531	544
1981	692	58	6,919	577
1982	652	54	6,646	554
1983	702	59	7,099	592
1984	964	80	9,339	778

* The American Petroleum Institute stopped presenting the data in this format in January 1985.

SOURCE: American Petroleum Institute, Monthly Drilling Statistics, monthly.

IV. Oil and Gas Expectations

The examination of the historical pattern of oil and gas activity represents hindsight and the attempt to explain why oil and gas events developed as they did. Investments, long-term commitments, and development plans are, of course, based on what one believes will happen, which may or may not be the same as what actually occurred.

A span of expectations can be deduced from examining the ranges of expectations included in the Annual Energy Outlook, published by the U.S. Department of Energy. The most appropriate variable to examine is the expected price of oil since the price of oil will influence all other activities including seismic crews engaged in offshore exploration, rig activity, new well completion, and eventually production.

World oil price ranges are represented for 1982, 1983, 1984, and 1985 in Table 6. In 1982 oil price expectations for 1984 ranged from $25.80 per barrel to $33.40 per barrel. Oil prices were expected to edge down from 1983 prices in the low scenario and stay approximately the same in the high scenario. These oil price estimates do not suggest any precipitous collapse in the energy markets. The long-range oil price estimates suggest a viable oil industry moving into 1990.

In the 1983 Annual Energy Report oil price expectations for 1984 and 1985 had edged downwards from the 1982 Report. The 1983 expectations were systematically lower than the 1982 expectations, but again the oil price expectations did not suggest a major reduction in the oil markets. The 1984 expectations suggest a

TABLE 6

WORLD OIL PRICE RANGES AS EXPECTED 1982-1985
Annual Energy Outlook
U.S. Department of Energy

World Oil Price For	World Oil Price Range Expected as of (Nominal Price Per Barrel) 1982	1983	1984	1985
1982	$34	--	--	--
1983	$29.7-$33.9	$29	--	--
1984	$25.8-$33.4	$25.0-$ 31.2	$28.8	--
1985	$25.0-$38.0	$23.0-$ 33.5	$25.0-$ 31.0	$26.5
1986	$26.6-$48.1	$25.1-$ 35.3	$26.0-$ 35.0	$22.0-$28.0
1990	$44.9-$77.0	$40.9-$ 65.0	$34.0-$ 57.0	$28.0-$40.0
1995	--	$59.9-$124.8	$54.0-$105.0	$44.0-$61.0

SOURCE: Various issues of Annual Energy Outlook, U.S. Department of Energy.

higher low range estimate for 1985 and 1986 as compared to 1983 estimates, but a lower low range estimate for 1990 and 1995. The 1985 expectations suggest lower price ranges for 1986, 1990, and 1995 as compared to the 1984 expectations.

Expectations formed after the dramatic decine in oil prices in 1986 will be quite different from expectations formed in 1985 and before. The collapse of the oil markets in 1986 was not generally anticipated.

Forecasts of total wells planned in Louisiana offshore and total footage to be drilled are available each January in an issue of the Oil and Gas Journal. These forecasts from 1982 through 1986 are presented in Table 7, along with revised estimates of wells drilled and footage drilled. The forecast is made at the beginning of the calendar year, while the revised estimate is made at the end of the calendar year when much more information is available.

In 1982 the original forecast was 810 wells to be drilled and the revised estimate was 780, approximately a 3 to 4 percent error. This represents excellent foresight in predicting wells to be drilled. In 1984 the original forecast was 850 wells to be drilled, an increase over the 1983 revised estimate of more than 100 wells to be drilled. But, by the end of 1984 the revised estimate of wells drilled was 1,010. The 1984 activity led to a prediction for 1985 of 1,150 wells to be drilled. By the end of 1985 the revised estimate was only 702. The 1985 activity led to the 1986 forecast of 600 wells to be drilled.

Forecasting the energy markets is quite difficult, but the concensus in 1982 through 1984 was that the oil markets had dipped slightly from the early 1980s but the dip was relatively small and the energy markets were operating at the new and permanent plateau. Only in late 1985 and 1986 did this consensus or widespread judgment get overturned.

TABLE 7

OIL AND GAS JOURNAL Forecasts of Total Wells and Footage to be Drilled in the Louisiana Offshore

Year	Forecast of*		Revised Estimate*	
	Wells to Be Drilled	Footage to Be Drilled (in Thousands)	Wells Drilled	Footage Drilled (in Thousands)
1982	810	8,292	780	7,994
1983	690	7,072	742	7,602
1984	850	8,708	1.010	9,789
1985	1,150	11,145	702	7,237
1986	600	6,203	N.A.	N.A.

* Beginning of Year.
** End of Year.
N.A. = Not Available.

V. Summary and Conclusions

The obvious fact is that Louisiana has been experiencing a stagnant economy since 1981. However, there was state-wide improvement in 1983 and 1984. The perpendicular decline in oil and gas activity occurred in 1986, and with it the percipitous decline in Louisiana employment.

The other obvious fact is that expectations regarding oil markets were gradually adjusting to the lower post-1981 prices. Price expectations were gradually adjusting, but no one anticipated the percipitous decline in oil prices in 1986 and the subsequent decline in oil and gas activity and total employment in Louisiana.

The **Chairman**. I want to thank the members of this panel, who have been excellent.

I want to thank each and every one of you who have come here to this hearing. I think we've had an excellent hearing. We've got a real message to take back to the President, the Congress and the American public.

We go now to the main arena where we will make some speeches about what it all means.

Thank you all very much.

[Whereupon, at 12:18 p.m., the hearing adjourned, subject to the call of the Chair.]

DOMESTIC PETROLEUM INDUSTRY OUTLOOK

SATURDAY, FEBRUARY 28, 1987

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Hobbs, NM.

The committee met, pursuant to notice, at 9 a.m., in Tasker Arena, Hobbs High School, 800 North Jefferson Street, Hobbs, NM, Hon. Jeff Bingaman, presiding.

OPENING STATEMENT OF HON. JEFF BINGAMAN, A U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator BINGAMAN. Would everybody please take your seats.

This is a hearing of the Senate Energy and Natural Resources Committee, and I want to thank you all for being here. Your presence today clearly shows the interest in this community. I believe, to start the hearing, I would like to ask Charlie Smith, who is on the school board here in Hobbs, to please come forward and lead us all in the Pledge of Allegiance. If you would all please stand.

[Pledge of Allegiance was performed.]

Senator BINGAMAN. Good morning to all of you. Let me just start by making a few comments, and then Senator Domenici will make some comments, and then we'll begin with our first witness, Congressman Skeen, who will then join us as part of the panel.

I think everyone here should realize that this is an historic occasion.

This is one of the largest, if not the largest, public hearing that's been held by a congressional committee here in New Mexico. I'm not certain, but I believe it is the first Senate hearing we've had here in Hobbs. I'm sure it comes close to being the largest public hearing ever held by the Senate Energy Committee. There was a hearing similar in size to this one in Lafayette, LA, just a few weeks ago, but I think this one certainly holds its own in comparison to it.

The purpose of the hearing is to discuss the issues and to send a message to Washington. We need the U.S. Senate, the House of Representatives, and the White House to know that the problems of the oil and gas industry need attention now.

I think it's clear to us that the future of our children and our grandchildren depend on the decisions that we make in this 100th Congress in the coming months to preserve the oil and gas industry in this country.

You may have seen the charts that are on display as you entered the arena and that are along the front of the podium; they tell this story very graphically.

Since October of 1985, the operating rigs in the U.S. are down 49 percent, drilling permits are down 50 percent, and imports from OPEC nations are up 66 percent. Under various scenarios, we can expect imports to exceed nearly 50 percent of consumption by 1995. In New Mexico, the revenues generated by this industry showed a 25 percent drop in 1986 alone. The total value of the New Mexico oil and gas activity has dropped from 13,200 jobs in 1985 to a low of 9,000 jobs in 1986. And the number of drilling rigs are down to an average of 29 compared to an average of 71 drilling rigs in 1985. And of the bankruptcies, in the State of New Mexico, there are an estimated 2,500 for 1986, one-fourth of those occurred in counties where most of the State's oil and gas is produced. Obviously, these statistics don't tell the total story of the impact on local communities and on businesses that depend upon the viability of the oil and gas industry.

Whether you've come to this hearing from Hobbs, or Lovington, or Roswell, or Artesia, or Midland, or Odessa, I think we need to leave here resolved to tell our friends and families that the Government needs to take action now to restrain the flow of cheap imports into this country and to stabilize the price of oil and gas.

This is not a regional issue. What we need nationally is an energy policy that's good for the entire country—not just good for new Mexico or for Texas. All Americans, whether they live in the Southwest, in the oilpatch, or in the Northwest, need to support policies that keep this industry alive and well.

And this is also not a partisan issue. Democrats and Republicans alike who care for the future of this industry need to work hard to find solutions.

This is a personal issue that concerns all of us, and I think some of the testimony today will describe the impact of the problem on many people here.

Before we go forward, I need to thank a few of the people who organized the hearing. I thank the Hobbs Chamber of Commerce for all the excellent work that it's done. Ben Alexander, my good friend, has taken the lead role in getting this hearing organized. Randy Owensby, who is the president of the Hobbs Chamber of Commerce, deserves particular praise for his efforts. Velma Wiseman and Kathy Norris, also did a tremendous amount of work to get the word out on this effort. Jim Britton is responsible for organizing the impressive equipment calvacade this morning. Also, thanks should go to the Chambers of Commerce in Jal, Eunice, Lovington, and Tatum, the news media throughout the Permian Basin, Jim Bob Warren, who donated the flag for the event and to The Taskervitch, the Hobbs High School Band, which did such a tremendous job this morning.

Let me also thank all of you for taking your time to be here on a Saturday morning. I know many of you have come a long distance and your presence here makes a strong statement about the seriousness of the problem that we're trying to address.

I want you to know that your concerns, your problems and your presence here will not go unnoticed in Washington. You have my pledge, and Senator Domenici's and Congressman Skeen's, that we'll do all we can to communicate your message to members of the Congress from all regions of the country, and the key members of the Reagan administration who need to listen to you. I need to start by making sure that copies of the testimony here today are made available to all Members of Congress, and we'll certainly do that.

Let me thank the chairman of the Energy and Natural Resources Committee, Senator Bennett Johnston, who was unable to be here today, but he sends his sincere appreciation to the efforts of everybody in making this hearing occur.

We are going to hear from 15 distinguished witnesses today who are well qualified to speak on the issues. In addition to that, we have some testimony that people would like to have included in the record. The following groups have asked to have their testimony included in addition to the oral testimony that's presented: the National Association of Royalty Owners; Navajo Refinery in Artesia; Mrs. Thelma Webber of Hobbs; and Mr. Steve Pearce of Hobbs. Their testimony will be made part of the record, and the hearing record will remain open for 30 days for anybody else who would like to submit testimony or further comments based on what they hear today.

I want to welcome my colleague on the Energy Committee, Senator Domenici, who has truly been a friend of the industry, and who has made very significant contributions in the Congress in seeking to find solutions to this current crisis facing us.

Before I defer to him for an opening statement, let me do one additional thing, and that is to read to all of you a Senate Memorial, a resolution passed by our State senate, requesting the United States to impose an import tax on foreign oil imported into the United States. This is a short resolution and I would just like to read it. It says:

> Whereas, the domestic oil and gas industry has undergone several disastrous years in the immediate past resulting in mass unemployment, insolvency of many producers, capping of many marginally producing wells and the loss of tax revenue by many Western States which have relied on the oil and gas production to finance the public health and welfare; and
>
> Whereas, the loss of the capacity to produce oil and gas and the ever increasing reliance on the foreign production of those commodities threatens to destroy the defensive capabilities of the United States; and
>
> Whereas, many foreign powers underwrite the oil industry in their country since they do not operate in a free economy, and the unfair price competition causes much economic hardship in the New Mexico oil and gas industry: Now, therefore, be it
>
> *Resolved by the Senate of the State of New Mexico,* That the United States Senate is respectfully requested to enact appropriate laws imposing an import tax on the importation of foreign oil and gas as a means of protecting the domestic oil and gas industry from unfair competition; and
>
> *Be it further resolved* That copies of this memorial be transmitted to the President Pro Tempore of the United States Senate, the Speaker of the United States House of Representatives and to each member of the New Mexico delegation to the Congress of the United States.

That is signed by Jack Stahl, president, of the New Mexico State Senate, and Juanita Pino, the chief clerk of the State senate.

So, without any further delay, let me defer to Senator Domenici for his opening statement about the issues before us today in the hearing.

STATEMENT OF HON. PETE V. DOMENICI, A U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator DOMENICI. Thank you very much, Mr. Chairman.

Let me first say to all of you, thank you once again. You have so frequently been kind to me, have visited with me and supported me. It's a real pleasure to have many, many of you that I see in small groups from time to time as I travel through and visit here with you. It's good to see you all in one room, hopefully united behind a terribly significant issue, not only for Lea County and New Mexico, obviously it is that, but for this great country of ours.

Many people today will say that we are being shortsighted in our energy policy because "OPEC will return."

Well, I'm not willing to say that because I think they already have. If you have any doubt, just look at the product of the Saudi overproduction which began in June of 1985. They brought prices crashing down, and the OPEC share of world production climbed from 28 percent to 35 percent in June of 1986.

The price of oil and gas in my State and our State fell from $26.15 to $11.28 in that time period.

In 1973 and 1979 the OPEC caused gasoline lines. In 1986 they caused soup lines. And if we don't do something about it in 1989, they will control our destiny, and I don't believe we need that.

Senator Bingaman indicated that the chairman of the full committee, Senator Johnston, held a hearing in Louisiana. I went there with him to the city of Lafayette, and we heard testimony there about the crisis in their economy and the pending crisis for the United States of America. And I ran on to an interesting statement of one of the witnesses that had been looking at these issues for a long time, and it said "Indonesian Oil Minister Subroto recently stated that the most recent pricing policies of OPEC are designed precisely to maximize profits for OPEC members and at the same time not stimulate U.S. drilling activity."

I went on to suggest that they are indeed smart enough, educated by us, informed on our economy and our industry, that not only do they not want to stimulate U.S. production, but they will keep the price of oil, if they can, at precisely the range to cause our industry to diminish and its capacity to contribute to diminish year by year and, yet, keep it low enough where alternatives will not come on board either, waiting for that day when they can then be in total control, and here sits America with alternatives not ready, with a weakened domestic industry, and if we think we have been in jeopardy in the past, there's no doubt in this Senator's mind that we will be in mortal jeopardy of being controlled from overseas, controlled by a cartel, controlled by many countries who could care less about you, about us, and about this country.

Now, we have pending in Congress no instant cures, because we don't know what they are; but at least we have an oil import fee bill, Senate bill 460. I introduced it with tremendous bipartisan support. Senator Bingaman is on it, and I'm pleased to announce that the chairman of the Finance Committee is on it, Senator Bentsen from Texas, and about nine other senators from both sides of the aisle.

We need to send a message loud and clear that for those in northeastern America it may be neat to have cheaper and cheaper prices of gasoline at the pump, but for those of us in oil patch, it is desperate. We will not have a viable domestic industry unless we do something about it.

Senator Bingaman, to you and to those who have helped organize this event, and to those who will testify, let me also join in my thanks. It appears to me our message is getting out a bit. It will get out somewhat more because of today and, hopefully, in the ensuing weeks, as we attempt to move this country ahead in Washington, get off the stalemate that presently occupies our time, that we have a reasonable chance of working this kind of import fee approach into some national policy on the energy side and on the physical side, and I'm very hopeful that we will be part of it, and it's pushed ahead and made more successful because of your activities.

Thank you very much.

[A news release from Senator Domenici's office follows:]

News
Release

Pete V.
Domenici
United States Senator

FOR IMMEDIATE RELEASE

CONTACT: MARY ANN HATCHITT
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DOMENICI INTRODUCES OIL IMPORT FEE BILL

(WASHINGTON, D.C., February 4, 1987) -- Senator Pete Domenici (R-NM), today introduced a bill which would impose a $4 oil import fee that would begin to phase-out dollar for dollar, cent for cent, when the price of oil reaches $18 a barrel.

The oil import fee bill is a bipartisan effort with ten senators, including Jeff Bingaman (D-NM), joining Domenici in sponsoring the legislation.

"If there was ever a clear case for anything, there is a clear case for an oil import fee now. In April of last year, CBO issued a report finding that an import fee would be the best means of reducing U.S. demand for imports and encouraging domestic exploration and production.

"The $4 fee would raise the price of gasoline at the pump slightly. However, in view of the 30 to 50 percent decline in gasoline prices, we believe this is a small price to pay for energy security and to guarantee our energy independence," Domenici said.

If the price of oil is less than $18, the fee would be $4.
When the average price reaches $19, the fee would drop to $3;
when the average price reaches $20, the fee would drop to $2;
when the average price reaches $21, the fee would drop to $1;
when the average price reaches $22, the fee would drop to $0.

If the weighted world price is $18.50, the fee would be $3.50. The average weighted price used in the Domenici bill is already being calculated on a weekly basis by the Department of Energy. The weekly average is used to be as price sensitive as possible and to maximize free market independence. Using the weighted average eliminates the potential for market manipulation.

The fee is structured in such a way as not be inflationary since the fee would begin to phase out at $18 per barrel. Currently oil is selling at about $18.50 per barrel. So, the fee, if enacted today, would only be $3.50. The fee would automatically terminate at $22 per barrel. The fee would be paid by the first person who sells in the United States, i.e. the importer.

The Domenici bill imposes the import fee as an excise tax. The excise tax can be administered by IRS without getting the government involved in the regulation of energy prices. Since excise taxes are deductible, the fee can be higher, thereby helping the industry more, without having the full cost passed on to consumers.

Preliminary estimates indicate this bill would raise $7 billion in fiscal year 1987 and $20 billion over the next three years.

-30-

Senator **Bingaman**. Thank you very much. Let me make one additional announcement, and then we will start with the testimony.

This hearing was originally scheduled to be held at the New Mexico Junior College auditorium. It was changed to Tasker Arena because of a very special happening here recently, and that was when Coach Ralph Tasker, for whom this arena was named, achieved his 900th career basketball victory. It was thought by the organizers that by having this hearing here we might be able to share in some of that victory and continue a winning streak with this hearing. So that's why we're here.

Let me start by welcoming our first witness, Congressman Joe Skeen, who is a member of the House Appropriations Committee, the Subcommittee on Agriculture, Subcommittee on Postal, Treasury and Related Issues. Congressman Skeen has, many times, demonstrated his concern and support of the oil and gas industry, and is here today doing that again. We look forward to his testimony and I would like to invite the Congressman, once his testimony is complete, to join Senator Domenici and I here on the podium for the conclusion—for the rest of this hearing.

Congressman Skeen, thank you for being here.

STATEMENT OF HON. JOE SKEEN, A U.S. REPRESENTATIVE FROM THE STATE OF NEW MEXICO

Mr. **Skeen**. Thank you very much, Mr. Chairman, and I can assure you I will assume that lofty position, side by side with two great Members of the U.S. Senate.

I want to commend you for bringing these hearings to Hobbs, U.S.A., as they call this wonderful place. I think that it serves to heighten public awareness of what our problem is, and that's one of the tremendous obstacles that we are dealing with in this issue. There is not a perception across the United States or in the Congress of the United States or in the administration that we have a serious problem.

I do want to commend you, too, for helping raise the level of the economy for at least one night or so by the influx of people we have had here. And I hope that money generates through this system quickly, because there is certainly an economic need here.

Mr. Chairman, I am pleased to appear today before this panel to discuss the critical state of our domestic oil and oil industry and what actions the federal government should take in order to avoid a permanent dependence on imported oil, and to ensure adequate levels of production within the United States.

And, quite frankly, Mr. Chairman, for the time being the United States has lost control of its energy future. As a result our nation and the American people are being exposed to disruptive economic and security threats more serious than any development short of war. And these threats stem from one reality: If current trends continue, our nation will be dependent on foreign oil for more than 50 percent of its oil requirements in approximately 2 years. And most of these imports will come from unstable and often hostile producers in the Persian Gulf which own 69 percent of the world's known oil reserves.

By their control and manipulation of oil markets, production and prices, the dominant Persian Gulf producers have, in a matter of months, reduced the domestic petroleum exploration and development industry to economic shambles. History has repeatedly demonstrated that excessive dependence on oil imports threatens a broad range of national security interests. Obviously, supply disruptions will impair the U.S.' military preparedness.

These disruptions would have to be met from emergency stockpiles and other temporary measures.

But not so apparent are a number of other vital national security interests which include: Diplomatic flexibility through avoidance of exporter leverage over our foreign policy. A real threat.

Superpower parity through minimizing Soviet advantage in domestic petroleum output.

Alliance cohesion through limiting disruptive competition for the world's available exports.

Financial stability through reduction of trade and imbalances and exchange rate vulnerability.

Economic growth through avoidance of erratic oil prices.

Through the tactic of deliberately collapsing world oil prices and the prices of competing fuels, these Persian Gulf governments have: Threatened development of all U.S. development of future energy resources, such as crude oil, natural gas, coal and nuclear energy; caused cancellation of U.S. developments of future energy resources, such as synthetic alternative fuels; damaged the strength of the national and international banking system; undermined conservation; and exacerbated our future balance of payment problem.

Mr. Chairman, unchecked and unbalanced, Persian Gulf oil producing countries have demonstrated a will and capacity to reduce America to a have-not status with respect to vital energy supplies. The dominant Arab OPEC oil producers have also proclaimed a twofold purpose in their manipulation of petroleum markets and prices. First, to eliminate marginal, high-cost production of conventional energy; and, second, to prevent the development of energy alternatives substitutable for oil.

Closer to home, Mr. Chairman, the scenario I have just described has clearly manifested itself by devastating the oil and gas industry in New Mexico. According to the New Mexico Oil and Gas Association, for 1986, and so far again this year, the oil and gas producing industry of New Mexico has experienced it's worst financial difficulties in more than a decade.

For example, the value of oil and gas produced in New Mexico plummeted 46 percent from 1985 to 1986. I know this is a reiteration of statements that have already been made, but I think they bear reiteration because, once again, we have to imprint this awareness on the public minds, the congressional minds and the minds of the administration. Dropping from 4.3 billion to 2.3 billion, the lowest point since 1978, which was 1.9 billion. Income from the State's "direct" oil and gas taxes fell 37 percent, from 367.2 million in 1985 to 230 million in 1986.

A more telling picture can be drawn from the average rig activity in New Mexico. In 1986 the average rig count dropped from a high of 135 in 1981 to a record low of 29 in 1986. The number of well completions also dropped to a record low of 1,243 wells completed, down from 2,727 wells completed in 1981.

The employment picture is even worse. From December of 1985 to November of 1986, the New Mexico Oil and Gas Association estimates a loss of 4,600 jobs in the oil and gas extraction industry.

Mr. Chairman, in my opinion the United States must take immediate action if we are to avoid new energy famines, which result from either deliberate foreign government policies, military hostilities, or violent terrorist acts in the volatile Middle East. National security and self-interest requires that we recognize an obvious fact: An adequate, secure supply of energy provides the underpinning of our economic and military strengths.

During the 100th Congress, I have added my name to legislation sponsored by Senator Lloyd Bentsen and other Senators, amongst them, I'm sure, the names of those senators from New Mexico in the Senate, and Congressman John Bryan in the House of Representatives, entitled the "National Oil Security Policy Act of 1987." This legislation addresses the critical need to establish a national energy policy in the face of the current oil price collapse and the continuing devastation of our domestic energy production. The measure calls for a national energy policy that would limit our dependence on foreign oil to 50 percent of domestic oil consumption, and requiring the President to annually assess U.S. oil production, oil demand and oil imports for the subsequent 3 years.

If the evaluation shows that foreign oil dependence will exceed the 50 percent level, the President would then be required, within 90 days, to present Congress with a plan to prevent further dependence on foreign oil through production incentives, renewable energy proposals, an oil import fee, and other measures. Congress would then have 90 days to accept, modify, or disapprove the plan through a joint resolution.

Mr. Chairman, I will also add my name as a cosponsor this year to the "Oil and Gas Production Revitalization Act," which is now being prepared for introduction in the House of Representatives.

The bill which was originally introduced during the 99th Congress by Representatived Beau Boulter and Senator Phil Gramm would remove impediments to domestic research, exploration, and development that are sorely needed in the short-term, why providing long-term guidance and policy evaluations at the highest levels of Government to ensure our domestic energy solvency and, hopefully, an energy secure future.

Many of the provisions of this legislation are embodied in the report and recommendations of the Independent Petroleum Association of America's Emergency Action Task Force which was approved late last year. The report urges the President to publicly identify the national security threat caused by manipulation of world oil price by the dominant Arab OPEC countries and identifies the legislative and regulatory actions needed to regain our future energy security. Without objection, Mr. Chairman, I would like to include a summary of the Oil and Gas Production Revitalization Act for the official hearing record, as well as the report and recommendations of the Emergency Action Task Force to the IPAA Executive Committee.

Senator BINGAMAN. That will be included.

[The material referred to follows:]

OIL AND GAS PRODUCTION REVITALIZATION ACT

SUMMARY OF PROPOSALS

OIL PROVISIONS

- **Windfall Profit Tax.** The bill repeals the Windfall Profit Tax.

- **Strategic Petroleum Reserve.** The bill requires that 50% of the purchases for the Strategic Petroleum Reserve be from domestic sources. Oil would be acquired at prices no less favorable to the U.S. than comparable foreign oil.

- **Economic And Security Assessment of Oil Imports.** The bill calls on the Department of Commerce in conjunction with the National Security Council to conduct a thorough assessment of the economic and security impact of petroleum imports under Section 232 of the Trade Expansion Act of 1962. Such an assessment would analyze the impact of oil imports on the national security interests of the U.S. and would constitute the foundation for a policy recommendation to the President regarding an oil import fee.

- **Export of Oilfield Equipment And Drilling Technology.** The bill asks the Department of Commerce in conjunction with other affected departments to analyze the economic and national security impact of current restrictions on the export of oilfield equipment and drilling technology.

NATURAL GAS PROVISIONS

- **Transportation of Natural Gas.** The bill requires the Federal Energy Regulatory Commission to mandate the transportation of natural gas without discrimination as to class of shipper or recipient.

- **Natural Gas Rate Design.** The bill prohibits differential treatment in rate design with regard to the allocation of costs, thereby assuring that U.S. and Canadian gas sell on a competitive basis in interstate commerce.

- **Cooperative Exemption.** The bill permits a limited exemption to independent producers to contract for the pooling of natural gas for sale.

- **Fuel Use Act.** The bill repeals the demand restraints of the Fuel Use Act.

- **Incremental Pricing.** The bill repeals the incremental pricing requirements of the Natural Gas Policy Act of 1978.

REGULATORY REFORM PROVISIONS

- **Waste Requirements.** The bill requires that the high volume petroleum production waste study required under the Solid Waste Disposal Act be performed by January 1, 1989. Affected industries, appropriate Departments and state agencies would be allowed full participation in the study.

- **Underground Tanks.** The bill clarifies Solid Waste Disposal Act requirements imposed on underground storage tanks and specifies that petroleum well cellars, sumps, drip collection devices, hydraulic lift reservoirs and oil water separators are not "tanks".

- **Facility Variances.** The bill expresses the sense of the Congress that permits issued under the Clean Water Act should authorize "fundamentally different factors" variances in order to allow for the differing technologies utilized in the industry.

- **Recycling Activities.** The bill expresses the sense of the Congress that recycling activities designed to conserve resources should not be curtailed when there is no data to demonstrate that such recycling practices pose any threat to human health and the environment.

- **Land Treatment Sites.** The bill expresses the sense of the Congress that any land treatment of petroleum waste should be encouraged so long as such treatment does not pose any threat to human health and the environment.

- **Industry Accounting Methods.** The bill expresses the sense of the Congress that the currently accepted "full cost" and "successful efforts" accounting methods used by the oil and gas industry should not be changed.

Report and Recommendations
# of the Emergency Action Task Force
to the IPAA Executive Committee
Approved by the Membership Meeting
October 28, 1986

The United States has lost control of its energy future. The nation and the American people are therefore exposed to disruptive economic and security threats more serious than any development short of war. These threats stem from one reality: the Nation will be dependent on foreign oil for more than 50 percent of its oil requirements in approximately two years, and most of these imports will come from unstable and often hostile producers in the Persian Gulf which own 69 percent of the free world's known oil reserves.

By their control and manipulation of oil markets, production and prices, the dominant Persian Gulf producers have, in a matter of months, reduced the domestic petroleum exploration and development industry to economic shambles.

Through the tactic of deliberately collapsing world oil prices and the prices of competing fuels, these Persian Gulf governments have:

- threatened development of all U.S. energy resources such as crude oil, natural gas, coal and nuclear energy;
- caused the cancellation of U.S. development of future energy resources such as synthetic alternative fuels;
- damaged the strength of the national and international banking system;
- undermined conservation; and
- exacerbated our future balance of payments problem.

Unchecked and unchallenged, Persian Gulf oil producing countries have demonstrated a will and capacity to reduce America to a have-not status with respect to vital energy supplies. The dominant Arab OPEC oil producers proclaimed a two-fold purpose in their manipulation of petroleum markets and prices:

(1) eliminate marginal, high-cost production of conventional energy, and

(2) prevent development of energy alternatives substitutable for oil.

The U.S. must act immediately if it is to avoid new energy famines, which result from either deliberate foreign government policies, military hostilities, or violent terrorist acts in the volatile Middle East. The public best remembers this through the gasoline lines in the 1970s and the resulting economic dislocations. National self-interest requires that we recognize an obvious fact: an adequate secure supply of energy provides the underpinning of our economic and military strengths.

Entirely new economic and security concerns have been raised by the demonstrated market dominance of Persian Gulf oil producers. These concerns now require bold and far-sighted energy policy initiatives by the Federal Government which recognize the following considerations:

- Capital commitments require a climate of economic stability which will inspire confidence for unprecedented amounts of private, high-risk investment. For example, exploration and development to restore and maintain 1985 levels of domestic oil and gas production, for the rest of this century, will cost approximately $1 trillion.

- The United States possesses enormous potential untapped energy resources; however, these resources cannot be developed under the cloud of uncertainty created by the "economic terrorism" unleashed by low-cost oil producing nations in 1986.

- Unlike our allies in the Free World, the United States' role of world leadership requires that its principal energy objective must center upon development of assured domestic supplies. Otherwise, foreign energy supply disruptions can be used to compromise U.S. strategic and foreign policy objectives. We cannot lead if subjected to the threat of political "energy blackmail."

- While the Strategic Petroleum Reserve is an important response to a short term emergency, it is impossible to store sufficient energy to assure long-term secure supplies. Adequate secure energy resources can be provided only by robustly healthy and growing energy producing industries. Conservation, while a valuable supplement to energy sources, will not solve the problem either.

- U.S. crude oil production already is declining because of a collapse of drilling, irreversible abandonment of high cost production and insufficient enhanced recovery projects. Declining production, coupled with increased demand, will cause our nation's dependence on foreign oil to rise to intolerable levels, the bulk of which can only come from the vulnerable and volatile Middle East.

- U.S. natural gas exploration and development have drastically declined because of unrealistically low gas prices. Natural gas prices are historically related to oil prices and have been driven down in part because of Arab OPEC oil price decreases. Regulatory difficulties and end use controls have also adversely impacted the transportation and marketing of natural gas and have prevented this energy source from displacing substantial amounts of imported oil. Continuation of existing circumstances will assure significant disruptions of gas supply.

These considerations underscore the energy security implications of the distressed economic conditions in the domestic oil and natural gas industry.

Energy security is not limited to military defense. Industrial productivity, economic stability, transportation systems, and many of the necessities of all Americans are dependent on reliable supplies of oil and natural gas. Continued destruction of our domestic energy producing capabilities by the deliberate supply and price manipulation of foreign governments is intolerable.

CONCLUSIONS

There is no free market in crude oil. Prices are being deliberately manipulated by Persian Gulf countries with the intent to dismantle the domestic petroleum industry, thereby denying the United States the ability to determine its energy future. All domestic energy sources - oil, gas, coal, nuclear, synthetics, and renewables - and conservation are price related and are in jeopardy.

Our national security demands that the rising level of imports be stopped. A revitalized U.S. oil and gas industry, with adequate and stable prices, is the key to winning this battle.

Timing is critical. Once destroyed, our oil and gas industry cannot be quickly restored. Many years are required to train geologists, engineers and technicians. Five to ten years will lapse between conception of geological ideas and marketing of significant new production. Action must be taken now to preserve this vital industry, including its supply and service components.

Admiral John M. Poindexter, the President's National Security Advisor, has recently stated to Congress that there is an "emerging national security concern" caused by the probability that "the Persian Gulf will once again become the major supplies to the Free World." Under these conditions, Admiral Poindexter pointed out, "a major oil disruption will place severe strains on our entire range of political-military resources." We believe that these fears are confirmed by the facts set forth in this report.

RECOMMENDATIONS

Therefore, we urge the President to:

1) publicly identify the national security threat caused by manipulation of world oil prices by the dominant Arab OPEC countries,

2) declare to OPEC that the United States will take all actions necessary to prevent the destruction of the domestic energy industries,

3) announce his support for strengthening the collapsing oil and gas industry and related energy industries, and

4) support exploration and development incentives and remove regulatory impediments to oil and gas exploration and development by:

   a) revising and enacting tax provisions, specifically including increased percentage depletion, more rapid expensing of lease and well costs, tax credits for exploration, and repeal of the windfall profit tax,

   b) deregulation of natural gas, repeal of the Fuel Use Act, and elimination of existing impediments to transportation of natural gas from producers to end-users, and

   c) opening of more federal lands for immediate exploration and development.

If the dominant Arab OPEC countries continue to hold oil prices below the level needed for the United States to maintain adequate reserves of oil and gas, we ask the President to take all appropriate actions to prevent OPEC control of our energy supplies and urge the use, whenever needed, of two actions specifically approved by the IPAA:

1) a floor price for crude oil to provide stability,

2) a variable import fee on crude oil and petroleum products, without exceptions or exemptions, to stabilize the price of domestic crude oil and products at an adequate level.

Mr. **Skeen**. It is important to note at this point that each of the recommendations which I have outlined is part of a total package, all of which is needed to revitalize our industry.

Accomplishing any single item or combination of items in the package, while beneficial, will not be sufficient to stimulate the needed level of energy development. Because of our past fragmented approach to energy policy has led to such a dangerous deterioration of the domestic petroleum industry, all of the actions I have outlined I believe are needed.

And, finally, Mr. Chairman, if the dominant Arab OPEC countries hold oil prices below the level needed for the United States to maintain adequate reserves of oil and gas, I am hopeful the Congress and the administration will take all appropriate action to prevent OPEC control of our energy supplies and urge the use, whenever needed, of two actions specifically approved by the IPAA and the IPA of New Mexico, which include: A floor price for crude oil to provide stability, and a variable import fee on crude oil and petroleum products, and, I emphasize, without exceptions or exemptions to stabilize the price of domestic crude oil and products at an adequate level.

Mr. Chairman, our national security demands that the rising levels of imports be stopped. A revitalized U.S. oil and gas industry with adequate and stable prices is the key and the only key to winning this battle.

And I thank you, Mr. Chairman, very much.

Senator **Bingaman**. Thank you very much, Congressman Skeen. If you'd come up here and help us with questions to the remaining panels that would be ideal.

We're going to handle this now with a system of panels. The first panel consists of four people, and I'd like them to come up and then go through their statements and then we'll have questions for them. Bill LeMay, who's the Director of the Oil Conservation Division of the Department of Energy and Minerals, representing Governor Carruthers today. Pat McCasland, who is the chairman of the Lea County Commission, a native of Lea County. Jody Martin, who is the Hobbs City Commissioner. And Keith Spradlin, who is the Lovington City Commissioner. If they would all come up to the table.

Why don't we start with Bill LeMay. If you would go ahead with your statement.

Our procedure here, because of the large number of witnesses, is to urge each of the witnesses to hit the highpoints and summarize their statement so that there will be some time for us to ask a few questions.

Please go right ahead.

STATEMENT OF WILLIAM J. LeMAY, DIRECTOR, OIL CONSERVATION DIVISION, NEW MEXICO ENERGY AND MINERALS DEPARTMENT

Mr. **LeMay**. Thank you Mr. Chairman.

Mr. Chairman, Senator Domenici, Representative Skeen, ladies and gentlemen, we live in very interesting times. Americans are witnessing the collapse of a great American institution, the domestic petroleum industry. Within a relative short time frame of 14 months, we have already seen a 70-percent drop in the number of rigs operating in the United States; an estimated production decline of 800,000 barrels of oil per day, and that represents approximately 10 percent of our domestic production; a 43 percent decline in the price of crude oil, and that varies almost daily; a higher percentage drop in natural gas prices, and that's coupled with a very severe marketing problem for many of our gas producers; unprecedented bankruptcies and unemployment in the oil fields and in the professional ranks of oil companies; the collapse of many banks and a threat to the solvency of many other banks; a decimation of the supply/service sector of our domestic industry. This can be witnessed right outside of this high school with all of the idle equipment that's stacked up, as well as lots of payroll right here in Hobbs that would like to work but can't. And probably most importantly, a serious threat to our national security because of our increasing dependence on the rising levels of imported oil from unreliable foreign sources.

Our State of New Mexico, because it is ranked seventh in crude oil production and fourth in natural gas production, is one of the hardest hit of the oil producing States. This is especially true because we're not a diversified economy. We rely heavily on all extractive industries, potash, copper, uranium, oil, and gas; they're all in terrible shape.

We New Mexicans need more diversity in our economy, but right now it's essential that the grandfather of all revenues of extractive industries, oil and gas, be brought back. And it's critical that the state receive these monies because they have to provide essential state services, such as education.

Now, I know it's difficult for governments, State governments in particular, to get a lot of sympathy, and it's probably even more important, though, to relate the tragedies in our industry to the personal tragedies that we see throughout the oil patch and right here in Hobbs. But what is even more tragic is the future destiny of our great country if America becomes a have-not nation dependent upon an unreliable source of energy.

We cannot afford to let our ability to control our own destiny slip away, and that is what we are doing when we embrace a national energy policy that promotes cheap, short-term energy at the expense of our long-term energy security.

We must reverse the trends of decreasing oil and gas production; decreasing reserves; decreasing revenues; fewer wells drilled; increasing imports of oil and gas; and increasing balance of payments problem. It is a national crisis in the making. Unless these trends are reversed, and they can be reversed, by (1) An Executive order or legislative act, Senate bill 460, authorizing an oil import fee. (2) Tax incentives, such as percentage depletion increases to former levels; tax credits for exploration; repeal of the Windfall Profits Tax; restoration of investment tax credits; and a reduction in the minimum tax treatment of oil related items. (3) A repeal of the Fuel Use Act and, (4) opening up of more Federal lands to oil and gas exploration.

Our country needs to maintain existing production and encourage new domestic exploration and development drilling if we are to provide for national security by reducing our dependence upon OPEC oil.

I might state that over my 30 years' experience in the oil and gas industry, I've seen many cycles of ups and downs, but I have never seen a down cycle as a depression as we know it today in the oil and gas patch because this particular down cycle is cutting into the very fabric, the muscle, of our industry. And, if we're asked, and we will be asked, to respond to a crisis in the 1990's, by the decimation of our industry, we will not be prepared to answer that crisis unless there's an industry to answer it.

We hope that this committee will recognize the danger signs threatening our national well-being. Producers and consumers alike cannot afford to be dependent upon OPEC oil at whatever quantities they want to give us in the future and at whatever price they demand that we pay.

Thank you very much.

Senator BINGAMAN. Thank you very much. Thank you very much, Bill.

Our next witness is Pat McCasland, the chairman of the Lea County Commission. Pat, welcome. We're glad to have your testimony.

STATEMENT OF PAT W. McCASLAND, CHAIRMAN, LEA COUNTY BOARD OF COMMISSION

Mr. McCASLAND. My name is Pat McCasland. I am the chairman of the Lea County Board of Commissioners.

I would like to thank you, Mr. Chairman, for bringing the Oversight Committee hearing to Lea County. It gives me great pleasure to welcome each one of you to our great County.

In recent months changes have been occurring in our county, some good and some bad. The current price per barrel of oil has brought about an ironic efficiency within the local petroleum industry. Marginal producing wells are being shut in, servicing equipment stacked, employees wages cut, and employees laid off.

My concern lies first with the welfare of the people. Employees and families are being affected by declining wages and hours worked. Those unemployed are experiencing distress and trauma of being jobless. Since 1980 11,000 jobs have been lost in Lea County alone. Currently, Lea County qualifies for economic development assistance from the Economic Development Administration, indicative of the environment. Unemployment on January 1, 1986, was 5.2 percent. As of December 31, 1986, the rate was 14 percent. Property values in the local market have declined by 35 percent, and often times a family's home is the largest and most important investment. With the wage deflation that has occurred, families are less able to afford the basic necessities of life that ironically have not, as yet, been reduced in price. Oil and gas production taxes provided 65 percent of New Mexico's revenues in 1985. Seventy percent of the State's budget goes toward education. Needed growth and educational funding levels are being affected adversely.

My second concern lies with local businesses. Retail business is down 28 percent. Total business receipts are down 33 percent from 1985 levels. Retail trade is directly affected by wages paid and hours worked. Both have decreased markedly in the last 12 months. Employee layoffs and deflated wage base have contributed to the large decline. This brings us to the problem the banking industry is facing. Bank failures are at a record level brought on by a record number of bankruptcies and nonperforming loans. The current statistics indicate that, in the retail sector, 35 percent of the bankruptcies come from there. Thirty percent come from real estate and eight percent from energy related loans. The service industry is to its knees economically. At the current level of economic stress now being experienced by Lea County businesses, our ability to produce oil and gas is being threatened. As one oil field drilling contractor put it, "We just won't be able to rig up," when foreign importers close the spigot.

Thirdly, I'm concerned about local government and especially county government. Its revenues have been directly affected by the unstable and diminished price of oil. The irony of government is that in times of economic depression the need for services increase, necessarily calling for more money. When the New Mexico Department of Finance and Administration, at budget time last year, told us that we should use a 30-percent valuation lower than the 1985 levels to compensate for the price drop in oil, we did just that. And our current revenues are 35 percent below that level. We budgeted a figure of 2.4 million for the first 6 months in this county as a budgeted revenue. Our actual revenues are 1.5 million.

We have an indigent fund in this county. Without a county hospital system, we employ this type of mechanism to guarantee emergency health care. We budgeted $513,000 for this fund, but due to unemployment and wage deflation caused by the local economic depression, the actual expenditure will be $954,000. A 46-percent increase in services. County government, by necessity, must be stable. It's not right now. We cannot approach stability without stabilizing price per barrel of oil.

Senators, my concerns extend well beyond the boundaries of my county and state. I'm concerned about the long-term health of our Nation and sympathize with the other 18 oil and gas producing States that have been traumatized by the unstable and diminished price of oil.

Gentlemen, I ask that this committee be objective when addressing two critical questions. The first, "Is the health of the domestic petroleum industry critical to the long-term economic well-being of this Nation?" And, second, "Will a weakened petroleum industry threaten our national security?

A healthy and vigorous domestic petroleum industry can accomplish many things that would be beneficial to the Nation. It would encourage exploration and development. It would enhance efforts in research whereby energy diversification and independence can become a reality.

According to Interior Secretary Donald Hodel, we currently import 39 of the oil consumed domestically. This is a level higher than that which was present in the early 1970's, when Saudi Arabia initiated the oil embargo against the United States.

I'm concerned that the domestic oil and gas industry is passing through the preliminary stages of atrophication. If allowed to continue, a recovery will be difficult. We cannot allow foreign importers to decide our faith.

I would hope the leaders of this great nation would set forth a realistic policy identifying independence as a function of national security.

Objectivity in your decision can only be arrived at if we all ask the question "What if?"

Thank you, Mr. Chairman.

[Attachments to Mr. McCasland's statement follow:]

Energy Policy Expert Sees More Oilpatch Hard Times

ALBUQUERQUE (AP) — An energy policy expert says he doesn't expect much recovery in the U.S. oil industry until foreign oil prices begin creeping back up to more than $20 a barrel, probably about 1989 or 1990.

Charles Kurtz Ebinger said the lack of an appropriate U.S. energy policy means it will be years before the domestic oil industry rebounds.

"It's time for the oil and gas producing states to start being critical of he administration," he said.

Ebinger, who was in Albuquerque Wednesday, is director of the Energy and Strategic Resources Program at the Center for Strategic and International Studies at Georgetown University in Washington, D.C.

He said a policy that favors low gasoline prices at the pump may be devastating in the long run. But he said most Americans are complacent about energy policy, which "will lead to the situation getting worse before it gets better."

The U.S. trade deficit grows by $6.5 billion for every million barrels of mported oil at $18 a barrel, Ebinger said.

He said he has gone before Congress several times to support oil import ees, but believes the fees have no chance of passage, partly because of bjections from the strong New England congressional delegation and ndustries such as airlines, trucking and the bakers' union which are appy with low oil prices.

He said he believes the only way to get import fees approved would be as part of an overall trade bill that addresses economic concerns in other reas, such as textile import fees.

Otherwise, the economies of oil producing states might be improved by ome form of tax relief to support cheaper oil and gas exploration or by a floor price" of $16 or $17 a barrel so those risking venture capital in oil nd gas exploration would not have to fear another collapse of oil prices rom actions of the Organization of Petroleum Exporting Countries, binger said.

He also said he does not believe OPEC plans to raise prices ramatically anytime soon.

Hobbs Daily News-Sun

Thur., Feb. 26, 1987—Page 1

REPORT ON REVENUES

	July 1984 - June 1985	July 1985 - June 1986	July 1986 - June 1987
GENERAL REVENUES			
CURRENT PROPERTY TAX	$1,367,140.76	$1,667,907.25	$1,792,778.90 (as of 1-31-87) 178,045.95 (est. 5 months) $1,970,824.85
OIL & GAS PRODUCTION TAX	$5,084,305.87	$5,331,170.02	$1,864,802.64 (as of 1-31-87) 1,478,502.65 (est. 5 months) $3,343,305.29
OIL & GAS EQUIPMENT TAX	$1,049,089.40	$1,304,967.22	$1,380,722.08
INDIGENT HOSPITAL REVENUES			
CURRENT PROPERTY TAX	$ 125,839.31	$ 65,900.85	$ 83,704.76 (as of 1-31-87) 10,127.25 (est. 5 months) $ 93,832.01
OIL & GAS PRODUCTION TAX	$ 507,228,89	$ 314,420.76	$ 69,169.58 (as of 1-31-87) 48,404.80 (est. 5 months) 117,574.38
OIL & GAS EQUIPMENT TAX	$ 96,562.81	$ 51,044.07	$ 45,203.75

OIL AND GAS ACCOUNTING DIVISION
AD VALOREM DISTRIBUTION BY FUND

Tax Rate-- 7.636
Total Valuation (98%) $1,264,561.43
75TH FISCAL YEAR

MONTH	TOTAL COUNTY DISTRIBUTION	TO DATE TOTAL COUNTY DISTRIBUTION	COUNTY OPERATIONAL	TO DATE COUNTY OPERATIONAL	COUNTY INDIGENT	TO DATE COUNTY INDIGENT
July	$ 652,319.58	$ 652,319.58	$ 297,017.11	$ 297,017.11	$ 11,611.39	$ 11,611.39
August	609,482.16	1,261,801.74	266,679.83	563,696.94	10,425.26	22,036.65
September	532,116.30	1,793,918.04	238,793.52	802,490.46	9,335.27	31,371.92
October	531,267.30	2,325,185.34	238,427.49	1,040,917.95	9,320.89	40,692.81
November	527,113.99	2,852,299.33	236,539.82	1,277,457.77	9,247.09	40,939.90
*** December	617,885.51	3,470,184.84	291,560.95	1,569,018.72	9,545.46	59,485.36
January	620,082.86	4,090,267.70	295,700.53	1,864,719.25	9,680.96	69,166.32
February						
March						
April						
May						
June						

***Estimated Revenues from Oil & Gas Production Tax for 86/87 $4,864,766 (Half-year $2,432,383)
Realized Revenues from Oil & Gas Production Tax for first half year 86/87 $1,569,018.72 REALIZED 32%
Estimated Revenues from Indigent Tax Levy for 86/87 $274,091 (Half-year $137,045.50)
Realized Revenues from Indigent Tax Levy for first half year 86/87 $59,485.36 REALIZED 18%

OIL AND GAS PRODUCTION EQUIPMENT AD VALOREM TAX DISTRIBUTION

December	$2,912,236.21	$1,380,722.08	$ 45,203.75

Senator BINGAMAN. Thank you very much. Thank you very much. I appreciate that.

Jo Ann Martin is the next witness. She is a Hobbs City Commissioner, former mayor of Hobbs and we look forward to your testimony very much, Jody.

STATEMENT OF JO ANN MARTIN, CITY COMMISSIONER, HOBBS, NM

Ms. MARTIN. Thank you, Mr. Chairman,

Mr. Chairman, Senator Domenici and Representative Skeen, distinguished guests, fellow Lea Countians, and oilpatch friends, it is with great pride that I welcome you here today on behalf of the city of Hobbs. We appreciate your attendance and your endeavors to come to us to let us tell you our problem.

I'm here today to speak on behalf of this city, but I'm also here to tell you that these people in the audience are people that I admire and respect. They are the ones who have worked long and hard to develop the oil patch as we know it today. We all have many thoughts and concerns we wish to convey to you.

To give you just a brief background: We are a moderate sized community located 5 miles from the Texas border. We serve as a trade center for many smaller neighboring towns and in 1985 we boasted of an approximate 45,000 people in and around our city. Today that figure is much lower.

Until recently, Lea County supplied 62 percent of the tax-derived revenues from oil and gas production, exploration, service and equipment to the State of New Mexico. Sixty-two percent from Lea County. As of today, the State of New Mexico's revenues from oil and gas for the first 6 months of the fiscal year is down from $61 million to $27 million.

In 1986, there were 2,551 bankruptcies in the State of New Mexico alone. Most of those were from hardworking men and women who usually pay their bills every month, but when the oil field stops, so do we.

We could tell you many tragic stories of the impact created by the oil and gas prices. When oil and gas stops working, everyone suffers—individuals, states and, yes, even Uncle Sam.

The drastic price decrease experienced in the past 12 months in the oil and gas industry has caused substantial problems for local governments. Specifically, for the city of Hobbs, the problems are both current and long range and must be dealt with now.

One of the short range problems is financial stability. The city of Hobbs receives approximately 80 percent of its revenues from the oil and gas related industries. The revenues are derived from exploration and production and the servicing of oil and gas wells. When exploration and production is substantially reduced, the city's revenues are reduced by two ways: The city receives revenues based on the value of the earnings of the oil and gas equipment used in the oil field and the amount billed for the exploration and production of new and existing wells. The city of Hobbs revenues are reduced when production and explorations are down because the service and other related work is also substantially reduced.

The city of Hobbs is experiencing a 32-percent decrease in its primary revenue source, and that's gross receipt tax, received during the first 6 months of this fiscal year.

Now, Gentlemen, in dollars and cents, that decrease represents $1.5 million in loss revenues in this 6-month period. If this trend continues, the city may experience as much as a $3 million reduction in revenues. The City Commission of the City of Hobbs approved a budget for this fiscal expecting to utilize approximately $2.7 million in cash reserves in order to continue to operate the city and to complete capital improvement projects. If the decreased trend continues, the city will be forced to expend even more of its cash reserve in order to finish this fiscal. The city of Hobbs is not in a position to continue deficit spending, yet we are expected to provide the same services and programs, in addition to the essential services, with less money and people and with substantially less funding from the State and Federal level.

The single most devastating action by the Congress of the United States against the cities in this country was the elimination of the Revenue Sharing Program. By eliminating Revenue Sharing, Congress avoided the political nightmare of having to cut many redundant and unnecessary programs. This slap in the face to the municipalities of this country caused an immediate financial hardship on every city in this county and country. This hardship will be felt for many years to come.

The long range difficulties are equally devastating. The upgrading of our infrastructure cannot rest or be delayed for even 1 year. The cities' existence depend upon the local governments' ability to provide water, sewer, streets, wastewater maintenance and improvements. The cost of these services have drastically increased during the past several years. Cities are unable to raise the fees for these services even to attain a breakeven status.

The city of Hobbs must continue programs to provide our infrastructure improvements needed since the boom days of 1982, 1983 and 1984. The city of Hobbs has expended over $40 million in the past 10 years on infrastructure projects, and still finds itself with needs for a north Hobbs water system at a cost of $3 million; a storm sewer system in south Hobbs of approximately $2.5 million; in addition to a wastewater treatment plant to increase its capacity at a cost of $800,000, to name only a few of the services that are needed at this time and essential projects that must be completed in the very near future. The cost of these projects has increased each year and we've had to delay them. The need is now upon us and further delays for these projects is slowly being removed from the list of options.

The State of New Mexico has introduced a package of tax increases and user fees total $175 million. However, municipalities will not receive any direct benefits from these increases, although our citizens are footing that bill. The increase in taxes on the State level has made it virtually impossible for the city of Hobbs to raise the gross receipts tax rate. Our citizens cannot afford to pay major increases on a State level and then be expected to pay similar increase on a local level.

Immediate relief must be obtained if cities such as Hobbs, NM, are to remain productive and cost effective. By statute, the city of

Hobbs cannot build a deficit like the Federal Government. The lack of an import tax and other restrictions and taxes placed on the oil and gas industry will eventually lead to a drastic decrease in local services that will include essential life-threatening programs and projects.

In talking with some of the other oil and gas financed communities, we found that they, too, are experiencing tremendous financial problems. Lovington reports 24 percent decrease in revenues. Carlsbad 24 percent decrease in revenues. Artesia tells us that they have 35 percent decrease in revenues over the last 2 years. And Roswell, even though they have some diversification, say they have a 13-percent decline.

Our neighbor State of Texas has also experienced monumental economic problems. Bib Spring's revenue is down 28 percent. Monahans down 20 percent, and Odessa tells us that they have 19 percent decrease and reports that oil and gas industry is the force of their economy.

Texas cities are in a delayed posture, and harder days are yet ahead for them when the reduction of ad valorem taxes are felt, and even when the economy has begin to recover, they're going to have bad problems still.

Oklahoma also relies on ad valorem taxes and sales taxes. Halliburton Manufacturing is the mainstay of Duncan, OK, and 7 months into their fiscal year they're down a 15-percent decrease in their revenues and significant declines in their population. Bartlesville, OK, is the headquarters of Phillips Petroleum; they report similar difficulties and anticipate more problems in the future due to the tax basis and the reliance upon the industry that is having severe problems.

In summary, the method of sale taxation is having a tremendous short-term impact on cities in the energy basin. New Mexico is the hardest hit because of our tax reliance on services. Texas will experience more reductions in revenues in 1987 and 1988 because of their reliance on the ad valorem taxes and a depleted tax base with the January 1987 valuation. Oklahoma is having less drastic fluctuations, but must look to an alternate taxing method in the very near future.

Mr. Chairman, it is obvious that something has to be done. It seems to me, and I feel certain, that looking around in this room in this city, like many others of you, it hurts you just as much as it hurts me to see vacant buildings, oil field yards stacked with unused equipment, defunct banks, and knowing that your hardworking neighbor of 15 years is losing his home because his job is no longer available to him.

I tell you, Gentlemen, it's our problem today, but it's the Nation's tomorrow.

It seems just like yesterday that we, like all Americans, were waiting in gasoline lines to fill up our automobiles. You will remember that in the early 1970's the Federal Government started a consideration of the rationing of gasoline for users. That, too, was when the 55-mile-an-hour speed limit was implemented. And I'm sure you remember, as well as we all do, that most Americans, especially us in the Southwest, thought it all was a hoax. How will you explain the shortage that will occur, maybe sooner than we think, when there is no one left in these little oil field towns to do the job, the dirty work of producing the most precious and needed commodity we have, oil and gas.

I certainly understand the people in other States are enjoying cheap prices of gasoline at the gasoline pumps, but will they love it when there is no American oil and gas and they and their children must go to war to fight for it.

It seems much easier to take the needed action today to preserve one of our most precious natural resources, that of oil and gas.

We are the greatest country in the world. No. 1 in program. No. 1 in military powers. But, gentlemen, you know much better than I that without the positive aspect of American produced oil and gas, we soon will be second to many.

I urge you to return to Washington and stress to your fellow statesmen, plead if you have to, beg if you must. Let this Nation develop an energy policy to ensure and secure the American oil and gas industry. I beg you, do not let the oil and gas industry die. Tell them for us. We're not looking for a handout, just a hand to assure this Nation's energy future.

Thank you, sir.

Senator **Bingaman**. Thank you very much. Thank you. Thank you very much for that excellent testimony.

Let me now call on our final witness in this panel, and then we'll have some questions. Keith Spradlin, who is Lovington City Commissioner and has been a Lovington City Commissioner now for more than 12 years. Keith, we're glad to have you here. Please go right ahead.

STATEMENT OF KEITH SPRADLIN, COMMISSIONER, CITY OF LOVINGTON, NM

Mr. **Spradlin**. Thank you.

Chairman Bingaman, Senator Domenici, Representative Skeen, ladies and gentlemen, it's certainly a privilege and an honor to have you in our community today, and a privilege and an honor to appear before you.

As a city commissioner from Lovington I am here representing the citizens of Lovington and the Lovington City Commissioners.

I know the problems of Lovington are no different than any other town, any other village, or county in the energy impacted states. Lovington has cut back only basic services; reduced the purchase of equipment, such as fire trucks, police cars and ambulance, and also reduced the purchases of other needed materials. When employees have retired or quit, they have not been replaced. We have dipped into our cash reserves just to exist. Gentlemen, these trends cannot continue indefinitely. However, as I look around the audience here today, I realize that our problems in local government are certainly no different than those of the owners of pulling units, drilling rigs, transport trucks, and other oil field services that are idle and with no relief in sight. Not only have they parked their equipment, laid off their employees, but many of them have closed their doors indefinitely.

As has already been pointed out, our employment level in the county has dropped by several thousand jobs in the last few years.

This has caused workers and their families to leave the county seeking employment elsewhere, and has caused a negative impact on local government and State government, as has already been pointed out here earlier.

Throughout most of our history, we Americans have never thought much about energy resources, even though energy has been critical to our national defense and it's been critical to our world political influence.

All this changed in 1973 when we woke up to skyrocketing oil prices and the creation of long lines at gasoline pumps. These events reemphasized the importance of crude oil to our national security and to our standard of living.

In the 1970's, OPEC took advantage of the tight crude supplies to increase world oil prices and also to increase their political influence throughout the world. Beginning in early 1986 and continuing to the present, some of these same countries took advantage of their huge petroleum reserves to drive the price of oil down into single digit figures. The immediate goal or their immediate goal was to get a larger supply of the market and increase their cash flow. But their long-term goal was quite obvious—to use lower prices to discourage oil exploration and production in the United States and other places throughout the world, thus setting a stage for a return to higher prices.

As a result of increasing crude oil prices in the 1970's, oil and gas reserves were discovered throughout the world, particularly in the North Sea and in Mexico, and in the Soviet Union. These countries did not join OPEC, but they did become exporters of crude oil.

Also increasing fuel cost resulted in conservation efforts. We started building automobiles that would go further on a gallon of gasoline and we began designing our homes to be more energy efficient. Each of us became more frugal from within our energy uses. Energy consumption was being reduced and world production capacity was increasing, so, by the end of the 1970's, we were beginning to experience the oil glut.

In an effort to keep the prices up, the Saudis started reducing their oil production. And, by the Summer of 1985, they had dropped from a high of 10 million barrels a day down to about 2.3 million barrels per day. Running short on cash and running short on patience with the other OPEC members that were not adhering to production quota, they started increasing their production rates. And, in less than a year, or by the summer of 1986, crude oil prices had dropped to less than $10 per barrel. There has been some improvement but, as you well know, today's price is very weak and very uncertain.

More than half of the world reserves are controlled by OPEC members in the Middle East. In the United States we have a very small proven reserve. We have less than 5 percent of the world's reserves while we are consuming about 25 percent of the world's production. That leaves the United States in a very vulnerable position. However, given the proper incentives, the oil and gas industry will find more energy reserves, and we will be able to maintain control of our national security and our destiny. But it cannot be done at today's prices.

We are being lulled to sleep by the oil glut. With low oil prices, conservation is losing emphasis, and consumption is increasing. It is tempting to sit back and enjoy low energy prices. The economy on a national scale gets a boost, our balance of payment is eased somewhat by not being—by not having to pay such high import prices. Sooner or later, the oil glut will reverse and it will become an oil shortage, and OPEC prices and world crude oil prices will begin to escalate.

Oil prices have caused exploration and development projects to be cancelled. Domestic oil production and reserves are declining. As shown on our chart here, in December of 1981 we had over 4,000 rigs running in this country. Today there is less than 1,000. Enhanced oil recovery projects, for the most, are on hold. Shale oil and research and development for alternate energy sources has all but come to a halt.

In 1959 President Eisenhower was concerned about the long-term damage to the American oil industry and to the national security. At that time a mandatory oil import quota system was initiated. The President said in initiating that program that "The certified requirements of our national security make it necessary that we preserve, to the greatest extent possible, a vigorous, healthy petroleum industry in the United States."

These words are as true today as they were in 1959.

That system was in place for 14 years. It helped the industry push exploration into harsher climates. And, in 1968, the largest oil field in the Nation was discovered on the North Slope.

Unfortunately, the oil import system lost its effectiveness.

Today we encourage the development of a communication that would educate the general public, making them aware of the problems facing the United States if certain energy issues are not confronted and positive actions taken.

The Nation definitely needs a comprehensive energy policy that is not only good for the energy producing states, but is good for the nonenergy producing states. We need a policy that is fair for the entire country.

We cannot continue to be complacent with low crude prices, increased consumption, decreased exploration and production, all of which is dragging us into further dependence on foreign crude oil and products. We need to plan our own destiny and not depend upon some other nation to decide it for us.

Thank you.

Senator BINGAMAN. Thank you very much.

Let met just start with two questions, and then I'll ask Senator Domenici and Congressman Skeen to ask their questions. Let me first ask Bill LeMay, I know the Governor and the legislature have been wrestling with some efforts in Santa Fe to try to ease the burden on the industry as well.

Could you give us any information as to what is going forward there?

I know there have been some efforts. I don't know how successful they've been.

Mr. LEMAY. Well, Mr. Chairman, I'm familiar with the efforts, and I, too, do not know how successful they are as those who know the legislative process up there.

We do have a bill that is much needed in the oil patch. It's a very—it corrects an inequity, and that is that we are on the unit tax for gas; and that—with the low price for gas, that means that producers are paying in excess of 16 or 18 percent rather than the 8 percent that the other States have on gas. It's a severance tax. It's an unfair tax. We're trying to get that reduced to a percentage basis from a unit tax.

I understand there are two bills, one of which has been tabled; the other which accomplishes this in a ramp-down fashion so that the revenue loss is not so severe in 1 year. I might point out that the revenue loss is not a revenue loss for operations. The severance tax is going to the state severance tax bonding fund and, therefore, it would require just less building, less capital projects for the State. But that's probably our most serious bill that would be of most benefit to the industry and to the people of the State. Other measures, I don't consider them as important as that one.

Senator BINGAMAN. Thank you.

Let me ask the representatives from the local governments here, any of you that would like to respond to this. If the price of oil were to remain in the $16 to $18 range for the next year or several years, what additional declines in revenue do you anticipate, or would you anticipate, for the county, for the cities involved? Would you see an acceleration or a continued deterioration of the economic activity here? Is that your expectation if the price is—does not go up.

Mr. MCCASLAND. Mr. Chairman, on county level, we provide some general services that help and assist in oil and gas production. We have a county arterial road system that is very critical to the servicing of the wells and transport of the oil, in some cases, out of field to the refineries, et cetera. I can envision without county revenues remaining—well, if they go down any further, we're going to have to reduce our maintenance on these roads, and the expense is going to be taken up by the oil companies and the producers; and it's a very negative situation. We need to have a stabilized price for oil and gas, one that provides—that feeds the system that gives us our production.

Senator BINGAMAN. Then that price needs to be stabilized above the present level significantly, in your view?

Mr. MCCASLAND. In my view, and from what I read, the experts say that 22 to—well, $22 would be a fair price. Here in this state and this county, too, if we don't have a stable price, there's no major corporation that'll—that's going to come into this state. I can guarantee you that if we could stabilize our tax base, that we would be able to diversify our economy, and problems like what are occurring now could be greatly diminished. So, in my mind stability is very critical.

Senator BINGAMAN. Would either of the other witnesses want to respond on that?

Mr. SPRADLIN. Yes, I think probably, as Pat pointed out, it takes somewhere between $16 to $24 to explore and find oil and produce it; $16 to $24 a barrel. So, I would say probably up around $18 to $20, we might be able to hold what we have right now, but I don't think we could expect any increase of any type in our revenues or in our services or in our basic services.

Senator **Bingaman**. Thank you.

Ms. **Martin**. Mr. Chairman, I believe, if you ask any of these gentlemen in this audience or these ladies that are associated with an oil company, they'll tell you that their company, if the price of oil stays the way it is, is not going to be spending any money doing any exploration or production other than what they already have to do. And we have a decline now in what we're seeing. Our revenues are down now, and they'll continue to go down, and we cannot possibly continue to maintain the quality of service that people get in Lea County for monies less than what we're getting right now. It's going to be a lot worse if they don't bring those prices back up.

Senator **Bingaman**. Thank you. Let me call on my colleague, Senator Domenici, for any questions he has.

Senator **Domenici**. Thank you very much, Mr. Chairman. I don't have a lot of questions, we have many witnesses; but let me just ask with reference to the various proposals that's around, Mr. LeMay, we know we've got to get rid of the windfall profits tax, even if it is not currently operative today; get rid of it. We know we have to get rid of the Fuel Use Act; there's no question about that. We know that we've got to further support FERC in their efforts to cause Canada to build the right cost into that base of natural gas which they're shipping off to the United States; and a lot of other things. But if you were to tell us right now, we're going back to Washington having heard that we ought to try to convince the legislature up there and the President to do something of this litany, do you believe that the thing we should do the quickest, that would have the most return and most help in the fastest period of time is some kind of oil import fee like the one in Senate bill 460, or thereabouts?

Mr. **LeMay**. Senator, there's no doubt that is the most critical, most important issue that could do the most good in the oil patch.

Senator **Domenici**. Now, I don't ask the rest of you as experts, but obviously in your service to your constituents and in your being informed in this community, you must have some kind of a feel. Would you concur with Mr. LeMay? If we had one thing we could do next week that would have a real impact and start things moving in the right direction, would it be a variable import fee, something like Senate bill 460? Do any of you want to comment on that?

Mr. **McCasland**. Senator Domenici, I would certainly think that that would be one of the things that you could do. I think that if we did that, that OPEC would only be able to stick the knife in so far and it wouldn't kill us, if you can understand that. I think——

Senator **Domenici**. I do.

Mr. **McCasland** [continuing]. That if we can bring it up to a profitable level where our future can be guaranteed, not only locally——

Senator **Domenici**. Right.

Mr. **McCasland** [continuing]. But nationally, I think that would be the first thing to do.

Senator **Domenici**. Jody, what do you think? How do you answer that?

Ms. **Martin**. Well, I think we have to give the American oil and gas producers the same equal chance, and if you're not going to levelize it somewhere, then, you know, there is no way we can continue to grow.

Senator **Domenici**. Keith.

Mr. **Spradlin**. Yes, Senator, I think that has a leveling effect and—because we are subject to a lot of EPA regulations, and so on and so forth, that has to be paid for, which they're not; so I think it would certainly be to our advantage.

Senator **Domenici**. Well, I'm firmly convinced that there is no easy answer, but it does seem that there is evolving one answer that has the most support for having the chance of doing the most good in the shortest period of time and stabilizing things, and that is an import—variable-type import fee on foreign oil and products coming into this country.

Now, let me just close with no question, just a comment. I want to say to you, Jody Martin, we go back there to Washington, and I think I speak for the three, they don't want to listen to this issue as if it was a human issue. I don't know how Joe—how they react in the House, but I know in the Senate, they talk about it in terms of the big oil industry. They talk in terms of the giant oil companies. They don't want to listen to the fact that this is people working, losing jobs, who have tried to get ahead, that there's small companies along with large ones, that there are service companies and everything that go with it, and it spells economic misery. And I personally thank you for putting that into perspective and I only wish they would listen to that, about oil and gas and this industry, as they urge that we listen to them about their industries as they begin to falter because they think those are human and somehow or another ours are not. And I thank you for your testimony in that regard.

Ms. **Martin**. Thank you. Senator, Mr. Chairman, Representative Skeen, I think that what we need to do is, like my husband tells me every day about my children, you've got to get their attention.

Senator **Bingaman**. Congressman Skeen, go ahead with any questions.

Mr. **Skeen**. Quickly, because I know we have a long list of witnesses, and I want to commend all of you because what you're doing here today is enhancing the public awareness of this problem, as I said right at the outset of what I had to say; that is, one of our biggest problems is how do you convince 535 Members of the U.S. Congress that this is a very critical issue, and if you have to base it on national security or whatever, let's get it done. And I appreciate your involvement.

Now, speaking to you and asking you about the local level situation or local entity, governmental entity situation, have you now—what is your base tax thing on gross receipt now, community by community? I know that—what I'm getting at is that you've just about put as much burden in that area as could possibly stand. Am I not correct? Have you—you've applied every bit of gross receipts tax option available to you, is that right? Am I not correct?

Mr. **McCasland**. Well, let me address the—what we do on the county level. Two years ago, when the price of oil was up, oil and gas production tax, in the form of a mill levy, generated 82 percent of this—it represented 82 percent of our tax base. Currently, we have—our tax rate is—for the county is 3.63, and we can go up to 11.85. With the reevaluation and the economic times that we have, it is impossible to do that at this time.

Mr. SKEEN. Let me ask you, in addition to that, have you curtailed services to any degree at all at the present time?

Ms. MARTIN. On a city level, Mr. Representative——

Mr. SKEEN. On a city level and county level. Go ahead.

Ms. MARTIN. On a city level, the city of Hobbs has 22 percent of our departments that have had decreases in our help. And, of course, anytime you cut down on the people that are working for you, you cut down on response time, you cut down on the amount of service, then you get into a problem that you have overtime if you don't have enough employees. So it's a balancing act that you have to——

Mr. SKEEN. Self-diminishing.

Ms. MARTIN. That's right.

Mr. SKEEN. One last question. In dealing with this issue across the country, we find that local communities or local government units have been increasingly attracted to the idea of increasing their revenues by adding gasoline taxes, which, on top of the problem that we already have, because of lower gasoline prices, it's become very attractive to local government units. And I understand that here at the State we have also offered a new tax recently. I have real mixed emotions. How do you folks feel about it as representatives of local government administration? To me, it would be—it sets off warning bells in my mind. If you grab this situation and say we'll take advantage of it taxwise to enhance our local revenues because we understand you've got a job to do and you've got to have money to it. How do you feel about gasoline tax?

Mr. MCCASLAND. Mr. Representative, I think that if a tax is—if you're going to call it tax, I think a gasoline tax is a user's fee, and that's the most severe type of tax that we can have. And as far as service that the county and local governments have to provide, that's another avenue whereby we might fund our local government.

Mr. SKEEN. I know it's attractive and that's why I want to know how you feel about it.

Mr. SPRADLIN. Of course, presently, it's very small part of our income and we don't have the authority to put on much of that tax, gasoline tax.

Mr. SKEEN. How much do you have, authority do you have?

Mr. SPRADLIN. I'm not sure just what the level is, but most of that is set by state statutes.

Mr. SKEEN. Thank you all—excuse me; go ahead, Jody.

Ms. MARTIN. I'm sorry, Representative Skeen. You know, I would think it would be a real shame that we just tax the people that live in New Mexico for something that everybody in the United States is going to have to utilize.

Mr. SKEEN. That's a very cogent response, and thank you very much.

Senator BINGAMAN. I thank this panel very much.

And now if the next panel would come forward please. Robert C. Anderson; Jerry Gilbert; Charles Perry; Beach Snyder; and Fred Schlicher. If they would come forward and we'll hear from them.

Let's go forward here with the testimony, if we could. We will use the same method of going through each of the witnesses, asking questions once the full panel has testified.

I would urge, if possible, that each of the witnesses try to summarize their testimony. I know that's difficult to do at times, but if you could make the main points in about 5 or 10 minutes at the most, and then allow us to have time for questions. We are running late.

Our first witness is Robert C. Anderson, division manager of the Chevron Corp., also representing the New Mexico Oil and Gas Association. He's been a resident of Hobbs for the past 8 years and is a past president of the Hobbs Chamber of Commerce, and serves on the Governor's Oil and Gas Economic Group.

We're glad to have you here, Bob, and please go forward.

STATEMENT OF ROBERT C. ANDERSON, HOBBS DIVISION MANAGER, CHEVRON U.S.A. INC., ON BEHALF OF NEW MEXICO OIL AND GAS ASSOCIATION

Mr. ANDERSON. Good morning, Senator Bingaman and Congressman Skeen, ladies and gentlemen. Today I'm here on behalf of New Mexico Oil and Gas and I want to thank you for the opportunity to appear before this committee and share some concerns that we have in the oil patch. I want to comment today on the very serious deterioration that's now occurring in our nation's ability to produce oil and, specifically, about New Mexico's problems in production.

Our industry strongly believes this decline has become a matter of urgent national concern, especially in the wake of events during the past year.

The sudden oil price collapse last year had a devastating impact on our domestic petroleum industry and our suppliers. It compounded and accelerated other ongoing trends which have drastically altered America's energy outlook.

It is vital that opinion leaders, the American public, and especially you, our elected officials understand the full implications of this new threat to America's economic and national security interests.

Although a great many factors have contributed to the present situation, the major one is the collapse in oil prices last year. And I would like to begin my assessment with that.

In a period of about seven months average oil prices slumped more than 50 percent from about $27 in late 1985 to less than $10 a barrel last summer, and then settled into a price range of about $15 a barrel for the rest of the year. That free fall in prices is the most severe economic blow the U.S. petroleum industry has experienced in a half-century.

The squeeze on revenues last year forced companies to make additional cuts in exploratory expenditures, in personnel and in capital budgets for enhanced recovery. Drilling activity was at a record low. And, just to give an idea of how low it is or was, Chevron was only drilling one exploratory well in the entire country, and we are one of the largest companies in the industry.

That kind of number, Mr. Chairman, ought to set off alarm bells throughout the country for anyone that's concerned about America's energy and economic stability. Oil and natural gas provide almost 65 percent of America's energy, and the petroleum we produce in the United States is the single most important factor in our country's effort for energy self-sufficiency.

What we have seen is a rapid deterioration in our country's ability to produce oil and gas. Oil consumption is up, oil imports are rising to fill a widening gap. The trends suggest that in the future America's situation will be far more unstable than today.

In fact, there's a serious concern that in just a few years, dependency on foreign oil could leave the United States vulnerable to another energy crisis, that we could again see the long gasoline lines at the service stations.

Some of the things that happened in 1986 that point out the seriousness of this matter, for the United States, crude oil declined by 800,000 barrels a day. Consumption, which had been fairly flat or level, increased by 500,000 barrels a day. Imports were up 1 million barrels a day.

And, Mr. Chairman, this brings me to a very significant point I think that people, particularly in the nonproducing states, overlook. We don't have a surplus of oil in the United States. The oil glut that we hear about is primarily a surplus in other countries, and that surplus is in OPEC; not in the United States.

Even with a vigorous exploration and development program the United States is only able to produce about two-thirds of the oil our Nation needs, but this production is a major and essential part of the world's total energy supply. It helps to moderate world oil prices and make our Nation less vulnerable to catastrophic supply disruptions.

Besides reducing the amount of revenue available, the prolonged slump has already had a widespread impact on the infrastructure of the U.S. petroleum industry. In the past 4 years, the work force in the upstream side of our business, and I'm talking about like our small businesses here in Hobbs, has gone down by almost 300,000 employees.

Now, let me turn to New Mexico's ability to produce oil and natural gas.

New Mexico has always played a vital role in supplying our nation's energy needs during times of crisis. However, our productive capacity has fallen sharply, and today New Mexico production continues to decline.

Crude oil production for New Mexico in 1986, amounted to 75.3 million barrels, a decrease of 3.2 million barrels; and this represents a 4-percent decline, and it's accelerating in this decline because of the collapse in crude oil prices.

New Mexico gas production has also suffered, falling from 893 billion cubic feet in 1985 to 689 billion cubic feet in 1986. This represents an alarming 22 percent decline in gas production in New Mexico, and is primarily due—I think Senator Domenici is familiar with this—because of the dumping of Canadian gas into the California market, which historically has been supplied by New Mexico.

In New Mexico, we have had numerous marginal and uneconomic wells that have been shut-in or abandoned because of low oil prices.

Perhaps of more importance, and because of the effect on national security, neither New Mexico nor our neighboring states are replacing rapidly depleting reserves. Based on oil reserves for New Mexico as of January 1, 1987, there was less than seven years of life remaining at the current rates. The message is clear—New Mexico has no surplus of oil and neither does the United States.

Returning again to the U.S. scene, we should be producing and exploring for as much energy as we can, because long lead times are required. It's impossible to reverse production trends once they begin. Despite these realities, lawmakers have been contributing to the worsening situation with unbalanced regulatory and tax policies.

For example, there are moves in Congress to prohibit development in the Arctic National Wildlife Refuge and also to ban further development in prolific offshore areas in California, Texas, and Louisiana.

Tax increases are another problem. Last year, the petroleum companies got hit with an almost $10 billion in additional taxes.

In addition, Congress approved a new Supertund to clean up abandoned toxic waste, and our share of that increased 17 times or $700 million.

Instead of making it harder to produce petroleum, Congress should be abolishing such counter-productive measures such as natural gas price controls, the Fuel Use Act, and the Windfall Profits Tax.

In summary, America obviously is losing the battle for energy independence. Sometime in the 1990's we'll likely be importing more than half our oil. We can't eliminate oil imports, but we can help minimize them. How much OPEC will charge, whether our country can avoid supply panics, long lines at the service stations, could well depend on the policies that the States and Federal Governments adopt now.

We still have some choices to make; hopefully, the right ones will be made before it's too late.

Thank you.

[The prepared statement of Mr. Anderson follows:]

REMARKS BY

R. C. ANDERSON

CHEVRON DIVISION MANAGER

TO THE

SENATE SUBCOMMITTEE ON

ENERGY & NATURAL RESOURCES

HOBBS, NEW MEXICO

FEBRUARY 28, 1987

Good morning, Senator Bingaman (members of your Committee). I am Robert C. Anderson, Hobbs Division Manager for Chevron U.S.A. Inc. Today I am here on behalf of the New Mexico Oil and Gas Association.

Thank you for the opportunity to appear before this committee and share some concerns we see here in the "Oil Patch". I will comment on the very serious deterioration that is now occurring in our nation's ability and, more specifically, New Mexico's ability to produce oil and natural gas.

Our industry strongly believes this decline has become a matter of urgent national concern...especially in the wake of events during the past year.

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The sudden oil price collapse last year had a devastating impact on our domestic petroleum industry and our suppliers. It compounded and accelerated other ongoing trends which have drastically altered America's energy outlook.

We're now facing a much more unstable energy future that will include a sharp increase in America's dependence on foreign oil. Within three or four years, the combination of declining domestic production and rising imports could make our nation extremely vulnerable to another major energy crisis.

It is vital that opinion leaders, the American public and especially you, our elected officials, understand the full implications of this new threat to America's economic and national security interests.

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Although a great many factors have contributed to the present situation, the collapse in oil prices last year is a good point to begin this assessment.

In a period of about seven months, average oil prices plunged more than 50 percent -- from about $27 a barrel in late 1985 to less than $10 a barrel last summer -- and then settled into a range of $14 to $15 for the rest of ~~the~~ year. That free fall in prices is the most severe economic blow the United States petroleum industry has experienced in half a century.

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In recent weeks, oil prices had made a modest recovery to the $18 to $19 a barrel range, but now appear to be weakening. The new production celings adopted by OPEC have only been in effect for a few weeks, so it's too early to know whether the OPEC members will be able to hold their total production to the 16-million-barrel-a-day level imposed by the new agreement.

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We expect the major test of OPEC's resolve will come this spring when the peak winter demand tapers off. But no one anticipates a rapid return to the price levels that existed only a year ago.

While this may be temporary good news for consumers, it's bad news for the other end of the pipeline -- the exploration and production part of our industry. On a long term basis, it's also bad news for the nation. You have seen reports on how severely the prolonged slide in oil prices has hurt the economies of Texas, Oklahoma, Louisiana, and, of course, New Mexico.

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The squeeze on revenues last year forced companies to make additional cuts in exploratory expenditures and in capital budgets for enhanced recovery projects. Drilling activity reached an all-time record low. To give you some idea of just how low that is, at one point, Chevron was drilling only one exploratory well in the entire country and we are one of the largest companies in the industry.

(During the peak drilling boom, we had as many as 35 or 40 rigs working in the U.S. on an almost continuous basis.)

That kind of number should set off alarm bells for anyone concerned about America's energy and economic stability. Oil and natural gas provide almost 65 percent of America's energy. And the petroleum we produce in the U.S. is the single most important factor in our country's effort to maintain a reasonable level of energy self-sufficiency.

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What we have seen is a rapid deterioration in our country's ability to produce oil and gas. Oil consumption is up, and oil imports are rising to fill the widening gap between production and consumption. The trends suggest that in the future, America's energy situation will be far more unstable than today.

In fact, there's serious concern that in just a few years, rising dependency on foreign oil could leave the U.S. vulnerable to another energy crisis, and to much higher prices for oil and other energy. Latest figures for 1986 show:

- Drilling activity reached an all-time low of less than 700 rigs at work. (That compares with 4,500 rigs only a few years ago.)

- Production of crude oil declined by about 800,000 barrels a day between February and the end of 1986 -- a 9 percent drop.

- The rate of oil consumption increased by nearly 500,000 barrels a day -- the first significant departure in six years from a flat or declining level.

- Imports increased by 1 million barrels daily, or more than 20 percent...reaching 37 percent of U.S. oil consumption. (That is a higher level than at the time of the 1973-1974 oil embargo and is rapidly approaching the level of 1978. It was during these times that we had long lines at service stations.)

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This brings me to a very significant point that many people overlook when assessing our nation's energy situations: We don't have a surplus of oil in the United States. The continuing oil glut you've heard so much about is primarily a surplus of crude producing capacity in other countries. And 95 percent of that is an OPEC surplus.

Even with a vigorous exploration and development program, the United States is only able to produce about two-thirds of the oil our nation needs. But this domestic production is a major and essential part of the world's total energy supply. It helps to moderate world oil price levels and make our nation less vulnerable to catastrophic supply disruptions.

Despite these very powerful warning signals, our country is becoming less and less able to produce additional oil and natural gas...for a variety of economic, technical and political reasons. Petroleum development cannot easily be turned up once production starts declining. Successful exploration and development is a very long and complex process. It requires a combination of capital investment, technical ability, and access to areas where you are most likely to find additional oil and gas.

Our country is falling behind in all three of those vital component areas.

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Besides reducing the amount of revenue available to energy developments, the prolonged slump has already had a widespread impact on the infrastructure of the U.S. petroleum industry. In the past four years, the workforce in the upstream side of our business -- exploration and production -- has gone down by almost 300,000.

An estimated 80 percent of this decline has been in the oil service sector -- the small and medium size firms which perform contract well servicing, seismic work, contract drilling, well logging and similar technical services.

These firms, along with many of the independents, are threatened most by the present situation. And if we lose too many more of them, it will be a severe blow to America's energy future...because the Independents and the specialized technical firms serve a vital role in the U.S. petroleum industry.

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Now let me turn to New Mexico's ability to produce oil and natural gas.

New Mexico has always played a vital role in supplying our nation's energy needs during times of crisis. However, our productive capacity has fallen sharply, and today New Mexico production continues to decline.

Crude oil production for New Mexico in 1986 amounted to 75.3 million barrels, a decrease of 3.2 million barrels from 1985. This represents a decline of 4% per year and is accelerating because of falling oil prices.

New Mexico gas production has also suffered, falling from 893 BCF in 1985 to 689 BCF in 1986, or a 22% decline. Our gas production has been adversely affected by the dumping of Canadian gas into the California market, which historically had been supplied by New Mexico.

Numerous marginal and uneconomic wells have now been shut-in or abandoned because of low oil prices. Operators are faced with such low profit margins per barrel that insufficient cash flow is generated to fund exploratory drilling and development projects, and capital investment has been cut sharply throughout the industry to an all-time low.

Perhaps of more importance and because of the impact on national security, neither New Mexico nor our neighboring states are replacing rapidly depleting oil reserves. Based on oil reserves for New Mexico as of January 1, 1987, there were less than 7 years of life remaining at current producing rates. The message is clear -- New Mexico has no surplus of oil, and neither does the United States.

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We should be producing and exploring for as much domestic energy as we can, because long lead times are involved in oil and other energy production. It's impossible to reverse production declines quickly, once down-trends have set in. Despite these realities, lawmakers and policymakers have been contributing to the worsening situation with unbalanced regulatory and tax policies harmful to domestic oil production.

For example, there are moves in Congress to prohibit development of part of the Arctic National Wildlife Refuge in Alaska -- an area with possibly the greatest potential for discovering additional giant oil fields in the U.S.

We're also seeing continued efforts to ban further development of California's prolific offshore area, where Chevron discovered the giant Point Arguello field in 1981 -- the largest oil field ever found in federal waters.

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Tax increases are another problem area. Last year, petroleum companies took heavy "hits" from Congress in the final version of the tax reform bill. Over the next few years, that bill will cost the industry a minimum of $10 billion in additional taxes.

In addition, Congress approved a new Superfund to clean up abandoned toxic waste sites. While we support the concept of the fund, we are distressed that Congress saw fit to increase our industry's share by 17 times or $700 million a year over and above the old Superfund. All industry has a responsibility to clean up these situations. But the oil industry should not have to bear a burden which is disproportionate.

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Instead of making it harder to produce petroleum in this country, Congress should be abolishing such counter-productive measures as natural gas price controls; the Fuel Use Act, which restricts use of natural gas with preference for coal; and the so-called Windfall Profits Tax.

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America obviously is losing the battle for energy independence. Sometime in the 1990s we'll likely be importing more than half our oil. We can't eliminate oil imports...but we can help minimize them. How much OPEC will charge...and whether our country can avoid supply panics and gas lines...could well depend on the policies State and Federal governments adopt now.

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We still have some choices to make; hopefully, the right ones will be made before it's too late.

Thank you.

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Senator **Bingaman**. Thank you very much. Thank you. Our next witness is Jerry Gilbert, who's president of Moranco Drilling. He's representing the International Association of Drilling Contractors and the Petroleum Equipment Suppliers Association. Jerry was born and raised in Hobbs and graduated from New Mexico State University and has served on the Board of Directors for the Hobbs Chamber of Commerce.

We're glad to have you here.

STATEMENT OF JERRY GILBERT, PRESIDENT, MORANCO DRILLING INC., ON BEHALF OF THE INTERNATIONAL ASSOCIATION OF DRILLING CONTRACTORS AND THE PETROLEUM EQUIPMENT SUPPLIERS ASSOCIATION

Mr. **Gilbert**. Thank you, Mr. Chairman, committee members, my name is Jerry Gilbert. I am the president of Moranco Drilling located in Hobbs. We're a company that's home owned and home operated. We're also members of the International Association of Drilling Contractors, on behalf of which I appear here today. I'm also speaking on behalf of the Petroleum Equipment Suppliers Association today. Together we represent over 1,500 member companies.

While some casual observers may think that the general condition of the oil field service and supply industry is improving, speaking as an individual who is taking punches daily in the fight for our survival, I can assure the members of this Committee that conditions have not improved.

Instead, we are experiencing only brief interludes of optimism in the ongoing devastation of the U.S. petroleum service industry.

This is an industry that was asked, and was able to respond, to the petroleum security needs of this country during World War II, and was asked, and able to respond, again, after the oil embargo of 1973.

The question is, Gentlemen: If the devastation of this industry continues at the current pace, how timely a response will we be able to give when this Nation finally realizes that its national security is a direct function of the amount of energy it can produce domestically, or will we be forced to spell America with a "K"?

That's why we're here today. To give you help and support in finding solutions in preventing these problems.

Drilling activity cannot be expected to increase unless there is some reasonable expectation of what the return on investment will be. Under present conditions, planning is difficult, if not impossible. Until some price stability is achieved, the long-term prospects of the oil field service industry will remain in doubt.

Our industry has been in a recession since early 1982, but it became apparent only 12 months ago that the recession had turned into a depression for most of us. The period from early 1982 to 1985 was one of significant contraction for our industry. The domestic rig count dropped from a peak of 4430 rigs running to 1950; a 57-percent reduction in 4½ years.

To bring it closer to home and help show why our local communities and our state are in trouble, the New Mexico rig count dropped from a peak of 156 to a current low of 27.

As we were adjusting with great difficulty to the harsh new market, the first 6 months of 1986 saw an unprecedented further collapse with the domestic rig count falling to 663 rigs on July 14. A total of an 85-percent reduction from 1982 to the middle of 1986.

The numbers above tell only part of the story. The largest portion of the work force in our industry consists of either highly trained professionals or those trained by many years of experience. Those who have been laid off, and there have been many with an 85-percent reduction in rig count, in many cases have been forced to migrate elsewhere. Odds are that they are unlikely to return to the oil field when the market eventually turns around. Would you, if your future consisted of perhaps 3 years of 7 days a week and as many hours a day as you can stand, immediately followed by 3 years with maybe 30 days of work every 90 days or so?

Trained people will be needed to replace those we lost. If we have to start at the college graduate level for our professionals, it's estimated that it could take over three years to train a graduate engineer to operate in the field at 90 percent efficiency. To get the remaining work force, we will have to depend on the few oil field training schools available and sweat out the years needed to become experienced. It requires a minimum of three to five years experience on a drilling rig to become a driller, which is our first-line supervisor and operator of our drilling equipment.

To young people seeking a career, the message is clear: Do not look in the oil patch.

The situation at Texas A&M Petroleum Engineering Department is representative of the problem that's developing. In 1982 the study body was 1,700. In 1986 the student body was 450.

A New Mexico example. New Mexico Tech at Socorro, the only petroleum engineering school in New Mexico, in 1982 the students body of the petroleum engineering department was 328; and, currently, the enrollment is down to 115 students. Then there is the Oil Field Training Center at Eastern New Mexico University—Roswell Campus. The training center that you, Mr. Chairman, and Senator Domenici recently visited, and I understand were very impressed. It is very important in that it is the only training school for entry level oil field workers in New Mexico. In 1982 the enrollment was over 500; and today it is only 250. The training school is in severe danger of being closed down from lack of students as well as funding from the state, which coincidentally is partially the result of the state of New Mexico's oil and gas income being severely reduced.

We have another large stake at OTC, however. The industry has invested from $5 to $10 million in equipment and building funds since its inception 10 years ago.

Skeptics who believe that we're crying wolf point out that our industry has always responded to price signals in times past. This is true, but in the past prices drifted higher or lower over a period of several years. Never, Mr. Chairman, has our industry experienced a price collapse of such magnitude as the first 6 months of 1986.

Scores of oil field service companies are simply gone. Those that remain have had to drastically reduce capacity and employment in order to survive.

In summary, Mr. Chairman, the oil field service infrastructure has been radically altered, and our ability to respond to an increase in domestic drilling is limited. Should the price of oil rise sharply, it may be impossible to respond to a major increase in activity in a timely and effective manner. Our response to changing price signals will not be the same because the industry itself is not the same.

There are a number of policy initiatives that are now before you introduced to address these issues and help shape the energy environment in which the United States will participate. Because the problems are complex, we recognize that the solution must be multifaceted, addressing both incentive to encourage the long-term development of domestic reserves and to effect growth in the country's oil demand. In other words, Mr. Chairman, this country must have a national industry policy. I would like to reaffirm and add support to a number of proposed solutions that you are already aware of and some that you have already introduced in Congress.

No. 1, impose an import fee or tariff on oil and petroleum products.

No. 2, tax incentives to improve cash flow and attract investment.

No. 3, repeal of the windfall profits tax.

No. 4, repeal of the fuel use act and incremental pricing.

In conclusion, Mr. Chairman, the 99th Congress considered a number of proposals to deregulate and otherwise assist the energy industry.

Many, like the repeal of the windfall profits tax are needed, but none would have had the immediate effect of an oil import fee. I believe an oil import fee would protect the crumbling drilling industry, stimulate renewed domestic exploration and production, and reverse the dangerous trend toward increasing reliance on unreliable foreign suppliers. It would also provide significant new revenues to apply against the budget deficit and help ease our international trade balance, which is largely attributable to energy imports. The oil import fee is the best hope for the future of the U.S. domestic oil supplies. I urge you to work for the enactment of the oil import fee for the good of the Permian Basin and the nation.

The question is: Will our domestic industries that merge from the 1980's be prepared to help meet the country's economic and security challenges of the 1990's? Your committee, by adopting our suggestions, could go a long way towards assuring that they are.

Thank you.

Senator **Bingaman**. Thank you very much.

Our next witness is Charles Perry, who is the president of the Permian Basin Petroleum Association, a friend of mine, and resident of Odessa, Texas.

We are glad to have you here, Charles.

STATEMENT OF CHARLES R. PERRY, PRESIDENT, PERMIAN BASIN PETROLEUM ASSOCIATION

Mr. **Perry**. Thank you very much, Mr. Chairman.

In as much as my testimony has been submitted in writing, I will only hit the high points at this time and leave the remainder for inclusion in the record.

My name is Charles Perry. I am the president of the Permian Basin Petroleum Association, which is a trade association representing approximately 1400 members from all walks of life in the Permian Basin of west Texas and New Mexico. Within our area is approximately 20 percent of the reserves in this country and approximately 20 percent of the oil and gas produced in this country.

I would mention also that I serve as president of an organization called the Council for Secure America, which is a coalition of the independent oil producers in the Southwest and the Jewish leaders of the eastern part of the country, and we also have a common goal of energy independence for this country, and we would urge a move in that direction.

I think energy independence is a well-recognized goal for reasons that are obvious, national security, reduction of deficits, things of that type.

Before I go any further, I would like to emphasize that our association is in favor of development of all energy sources; not just oil and gas. I'm talking about coal, nuclear, wind, solar; we're going to need it all before it's over with and we need it as soon as possible.

Now, the goal of energy independence, particularly in oil and gas is something that's probably not achievable in the immediate future.

It's been estimated by our association, as well as other industry associations, that it will take an active rig count of 3000 to 3500 just to maintain the current production level and current reserves. And this was pretty well proven in 1981 and 1982, when we had average rig counts in that area; and in 1983 we did realize a leveling of reserves and a leveling of production. So I think these figures are accurate.

I think it is significant that today we have only 800 rigs, approximately 25 percent of what it's going to take just to stay level. This rig count is defined almost yearly since 1981, and we're not even sure the bottom has been hit at this time.

Oil and gas is an investment—capital intensive industry and it's plain Economics 101. There are three factors that enter into it. One is income, second is operating cost, and third is tax level. Any one of those three variables also can improve the investment attractiveness of oil and gas or it can diminish it. And, certainly, the 1981 tax or—correction. The 1986 Tax Act did retain a lot of incentives for the industry, perhaps more than some of the other industries you received. However, these incentives, in our opinion, right now are not adequate to stimulate any drilling, and it comes from a lack of confidence in what level of oil price we will see in the future.

Now, bear in mind, a large part of the production in this country has been discovered by the independents; estimated as high as 80 percent. And independents drill their wells with either borrowed or investor capital. And right now, neither investors nor lenders have any confidence in the level of the oil price that is here today, and probably won't without some kind of ability to assure that price level remaining at some predetermined level.

For this reason, I think that probably the import fee is the important single piece of legislation that could reinstill confidence in the industry in the very near future.

We would propose and recommend a floor price in the range of $22.

Now, if you recall the three thousand plus operating rig level that we feel we need just to maintain the current level of production, we believe that that $22 alone will only stimulate approximately 1,700 active rigs, based on prior statistics, with the current tax level.

It's a little unique, but if you will look back, the industry was able to stimulate the greatest amount of drilling activity in an era of relatively high tax rate, 70 percent tax rate, maximum rate, on earned income. Because, if you look at the economics, drilling is stimulated by a high tax rate and an incentive for drilling which occurred prior to 1982. However, we're not proposing that you raise the tax rate back up. That's not the point. I'm just saying it's a matter of fact that that's what did occur.

The import fee has another advantage, and that is this: that you can create conservation with a tax on products. An import fee will create conservation, but it also will provide a disincentive for imports and an incentive for domestic production; therefore, it's more important that the import fee be applied rather than a tax on products.

We would strongly recommend a return to 27½ percent depletion allowance for all wells drilled after January 1st, 1987. This will put the incentive on drilling new wells. And we estimate that this could add approximately 500 to 700 active rigs with this return of the 27½ percent depletion allowance.

There are several other factors that will improve the drilling activity. Repeal of the windfall profits tax; repeal of the fuel use tax; incrumental pricing; old gas deregulation; and, certainly, opening up more Federal land and offshore tracts for exploration.

And these measures combined could perhaps add another 400 to 800 rigs. If you put these all together, this program would return us in the range of 3,000 rigs a year, which would, at least, hold us smooth for the foreseeable future.

I think there's a second benefit that I'll mention here. It's been estimated a return of 3,000 rigs will create approximately 200,000 to 300,000 additional jobs over the current level today. I don't think we can estimate what this will do to the economy, but if you look at the ripple effect through the entire economy, this certainly would benefit the country considerably from where we are right now.

One last word, and that is regarding stripper wells. And I mention this only because in various testimony that I've made in the past, I've heard too many nonindustry witnesses recommend that no incentives be put on stripper oil production on the grounds that when the economics will support it, people will go back to and drill stripper wells. This will not occur. If we abandon stripper wells they're gone. Water encroachment will eliminate the possibility of recovering those.

Stripper wells contribute about 15 percent to our production in this country. It's very important, and every incentive that we have now, plus any incentive we can think of for stripper wells, definitely need to be offered for them to keep them in production.

Thank you very much.

[The prepared statement of Mr. Perry follows:]

Testimony by

Charles R. Perry

President, Permian Basin Petroleum Association

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Before the

Energy & Natural Resources Oversite Hearing

February 28, 1987

Hobbs, New Mexico

TESTIMONY BY CHARLES R. PERRY
PERMIAN BASIN PETROLEUM ASSOCIATION
BEFORE THE ENERGY & NATURAL RESOURCES OVERSITE HEARING
FEBRUARY 28, 1987 - HOBBS, NEW MEXICO

ABSTRACT

This testimony describes those factors which the Permian Basin Petroleum Association feel have negatively impacted the drilling rig count in the United States over the past five years. In addition, it discusses the need of striving towards energy independence. The testimony further includes recommendations for steps to be taken in order to stimulate drilling activity within the United States. Furthermore, estimates are provided of additional drilling rig activity which will be stimulated by the various recommended steps to provide additional incentives for drilling new wells.

Mr. Chairman:

Members of the Committee:

My name is Charles R. Perry. I am pleased to be here in my capacity as President of the Permian Basin Petroleum Association, which is a trade association composed of over 1100 independent oil and gas producers, service and supply industry representatives, and the public at large located in the vast Permian Basin oil producing area of West Texas and New Mexico. The Permian Basin contains approximately 20% of the domestic oil and gas reserves and produces approximately 20% of the oil in the United States. I also serve as President of the Council for a Secure America, which is a coalition of independent oil and gas producers and the friends of Isreal in this country. In addition, I personally own interests in various oil and gas ventures.

Many of us in this country have long felt that energy independence is an important and worthwhile goal for the United States. This belief has been supported by the Congress and the Administration for many years. My testimony today assumes that it is still the belief of the Congress that energy independence remains a worthwhile goal for this country for the following reasons:

1. For the security and national defense for this country.

2. To reduce deficit balance of payments between this country and foreign countries.

3. To allow some measure of strength in dealing with oil exporting countries (OPEC).

4. To develop and increase domestic employment, and provide markets for a broad range of goods and services.

My testimony will provide the best estimate of the Permian Basin Petroleum Association as well as my own personal experience as to what will be necessary to provide some level of energy independence.

First, I would like to make it abundantly clear that our Association supports not only the development of the oil and gas industry, but the development of all domestic sources of energy as well as energy conservation. It is our belief that even with rapid development of all sources of energy and conservation, achieving the goal of energy independence is still a long way off. However, in this testimony today, my remarks will be confined to the oil and gas industry inasmuch as this is the area in which the Permian Basin Petroleum Association has expertise.

Realizing that the goal of total energy independence cannot be obtained in the near future, perhaps a more reasonable intermediate goal would be to maintain our current reserves and production level of oil and gas, to prevent us from continually increasing our imports of foreign oil. Our Association, as well as most energy experts believe that it will be necessary that the country maintains approximately 3000 to 3500 active, operating drilling rigs in the field in order to discover and develop sufficient new oil reserves to maintain our current levels of production and reserves. The 3000 to 3500 operating rig level is an estimate, but it certainly is in the proper range, as borne out by the drilling rig activity in 1981-1982, which, according to recognized data, resulted in reserve additions in 1983 approximately equaling the production in 1983. Perhaps the most alarming figure that can be added to these statistics today is the current active drilling rig count of approximately 800 rigs, down from the peak operating drilling rig count in 1981 of approximately 4400 rigs. The active drilling rig count has declined almost yearly since 1981, and the bottom may not have occurred.

Oil and gas exploration and production is a capital intensive industry, and like any other investment, it attracts investment capital when it shows an adequate rate of return on the investment. Unfortunately, investors, in order to make an investment in this risky industry, must receive a higher rate of return to compensate them for the risk compared to other relatively safe investments, such as bonds, certificates of deposit, etc. This rate of return on investment can be influenced by gross income level (related to the price per barrel of oil), operating costs, and taxes. The combination of these will determine the operating income of an oil and gas investment.

Ironically, the industry was able to stimulate the greatest amount of investment capital during the period of relatively high tax rates, with incentives in the form of tax deductions from this high tax rate for those who drill for oil and gas. We do not believe that it is in the best interest of this country to maintain high tax rates, and certainly concur that an objective of lowering the overall tax rate is a worthwhile objective for the good of the country. Unfortunately, this does not stimulate investment capital for oil and gas drilling and exploration.

Our Association has correlated a number of statistics to determine the impact of various factors on the active rig count in this country. Obviously, the price for oil directly impacts drilling rig counts. Also, a higher tax rate, with incentive deductions for drilling and exploration, stimulates drilling. However, the reduction of the price of oil which occurred in 1986 had the most devastating impact on the active rig count ever experienced in this country. We think that there has been an over reaction to the price decline caused by the unknown --- that is, not knowing whether oil prices in 1987 will be $8.00 per barrel, or $18.00 per barrel, or perhaps both.

It has been estimated that independent producers drill 80% of all discovery wells. However, most wells drilled by independents are financed by either outside investor capital or borrowed capital. Today, neither investors nor lenders have any confidence in the price of oil remaining at any level. Thus, no capital, either borrowed or investor, is available at this time to finance new drilling ventures.

Our testimony thusfar has indicated the factors which have created the drastic reduction in the drilling rig count which we are certain will result in a reduction of domestic production. There are many ways in which sufficient incentives could be provided to stimulate drilling toward a 3000 plus active rig count, and our proposals discussed hereafter represent suggestions of what we feel are obvious ways to achieve this level of activity.

There are two manners in which a government may stimulate an economic activity: (1) tax incentives, and/or (2) direct subsidies. We believe that the tax incentives are far more beneficial and cost effective than subsidies. In general, a tax incentive of $1.00 will result in many dollars worth of benefits. Therefore, we certainly support the incentives retained for the industry in the 1986 Tax Bill. Unfortunately, we do not feel these incentives will result in any increase in active rig count with the current uncertainty in oil prices. For this reason, we suggest the following steps which we believe would cause the active rig count to rise toward the 3000 rigs necessary to maintain current production and reserves:

1. Impose a variable import duty on all imported crude oil and crude oil products to establish a floor of $22.00 per barrel for domestic crude.

   The import duty will effectively raise the price of domestic crude to $22.00 per barrel which would generate additional investment capital for the industry and return investor and lender confidence to the industry. We believe this will cause an increase in the active rig count to approximately 1700 rigs.

The advantages of an import duty include the following:

a. It would apply a disincentive on imports and an incentive for domestic production. This will encourage development of all domestic energy sources as well as conservation.

b. The import duty, when combined with increased Federal royalty income, and increased Federal income tax from higher income on oil and gas, should result in up to $20 billion per year of revenues for the Treasury, which would be of great value in reducing our deficit.

2. Provide a 27.5% depletion allowance on all new wells drilled after January 1, 1987.

This would provide the incentive on only new wells to be drilled in the future. We estimate that this would increase the drilling rig count by approximately 500 to 700 rigs.

3. Repeal the Windfall Profits Tax.

4. Repeal the Fuel Use Act, Incremental Pricing, and old gas regulation.

5. Open more Federal lands and offshore tracts for exploration.

The above measures would add perhaps 400 to 800 additional active drilling rigs.

It has been estimated that increased drilling activity to a 3000 to 3500 active rig count will generate between 200,000 and 300,000 additional jobs. The income of these workers, as well as the income of the service and supply industry, contractors, etc., will add an additional amount of tax revenues to the Treasury. We are not in a position to estimate what impact this may have on tax revenues, but when it is multiplied by impacting the economy favorably throughout the entire Southwest, the impact will be very significant.

Regarding stripper wells, these are marginal income wells which Congress has wisely considered to be a special case in the past. Stripper wells provide approximately 15% of the oil produced in this country. It is definitely in the best interest of this country that these wells continue to produce as long as they possibly can, and we feel that these wells should receive whatever incentives are necessary to keep them producing. I personally have heard non-industry witnesses propose that these wells be abandoned until such time as economics allow them to be produced. However, I can assure you that once a stripper well is abandoned, it is technically impossible to recover any oil remaining in place, due to water encroachment within the reservoir.

We sincerely appreciate the opportunity of appearing before this committee, and I would be happy to attempt to answer any questions within my area of expertise which committee members may have.

Senator BINGAMAN. Thank you very much.

Our next witness is Dean A. "Beach" Snyder who is the president of DA&S Oil Well Servicing, representing the Association of Oil Well Servicing Contractors. Beach is the past president of the Hobbs Chamber, was elected and presently is serving on the Board of New Mexico Junior College.

We're glad to have you here, Beach.

STATEMENT OF DEAN A. "BEACH" SNYDER, PRESIDENT, DA&S OIL WELL SERVICING INC., ON BEHALF OF THE ASSOCIATION OF OIL WELL SERVICING CONTRACTORS

Mr. SNYDER. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee, thank you for taking the time out of your busy schedules, certainly, to visit Hobbs and for the interest that you have exhibited for the problems that besiege a vital segment of our national economy and security interests, the energy industry.

As you indicated, I'm president of an oil well servicing firm here locally. We operate 51 mobile well servicing units in Lea County and west Texas. I'm also serving in a capacity of representing the Association of Oil Well Servicing Contractors, a national trade association and their suppliers operating throughout the United States. This organization presently has 689 members representing approximately 4,050 rigs and tens of thousands of employees. Most of these are small independent companies operating up to 10 units with 50 employees or less. We are but one segment of a vast and complex industry of service and supply that is of significant importance to the production of energy.

Since the first oil price and supply shock of 1973 our industry has expanded to meet the demands of a country wanting energy security at affordable prices. It took us from 1973 to 1981, 8 years, to more than double the inventory of rigs and manpower to adequately meet the requirements of a growth industry supplying energy needs. This expansion started subsiding in 1982 as prices stabilized and declined slightly and supply and demand came into line. The well servicing industry experienced a contraction, but was adequately able to meet the demands of the producers. During this period prices for our services and wages for our personnel saw decline. Even though there was some attrition in equipment and personnel, we still had the capacity to service the needs of the consuming public. However, beginning in early 1986, the price of oil started a precipitous dive and our industry has experienced a severe contraction.

The net effect of this on our industry and the nation is from a peak capacity in the early 1980's of slightly over 8,000 units, for practical purposes, the fleet is now around 5,500 units. This is due to stacking of rigs and cannibalization for parts to keep costs down, in addition, and significantly so, to the departure from the industry of the manpower necessary to run the equipment.

The United States has some 850,000 oil and gas wells capable of producing, given an economic incentive to do so. The AOSC estimates that it would take some 5,000 well servicing units just to maintain optimum production from those wells. It is estimated that

25 percent of these wells are currently shut-in due to low oil and gas prices or for repairs that are not economical at today's prices. Some figures worked up at the AOSC meeting a couple of weeks ago, at a demand price of $18 for 1987, we could expect to utilize some 3,140 units, a slight improvement over 1986, but not enough to respond to future demand growth. We are already seeing a price deterioration of that $18 level. We are somewhat in the $16 range now. When and if the shut-in wells are reopened, an additional 1,900 rigs will be required to handle this increased load. If that happens in the short-term, the ability of the industry to respond should be adequate. However, if the current atmosphere of volatility lasts much longer, the response time will greatly increase due to lack of qualified personnel with the necessary experience in a highly specialized industry. In addition, should we have another supply/price shock such as 1979 and need full capacity for increased exploration and production, it would take several years for our suppliers to be able to meet that demand. This would assume that we could attract and train or retrain the additional thousands of personnel that would be needed to operate at increased levels.

I've been speaking to you of our national well servicing industry, but I'd like to give you some data concerning our company, which I think is probably representative of the vast majority of individual firms that make up this industry. Since 1982, we have reduced the price for our services by 23 percent, which represents 41 percent in real dollars. Our employees have taken a 19-percent cut in wages and benefits over that period, which represents a 37-percent decline in real dollars. In addition, we are now operating at 50 percent of capacity. We have lost 108 personnel, which is 41 percent over our peak, of which 68 left in the past year alone due to the severe drop in the active. Those 68 people alone represented 358 years of experience with our company only. Since our company represents slightly less than 1 percent of the industry, these numbers are very significant on a national basis. It would take many months, and perhaps several years, to be able to find and/or develop qualified personnel to reach full capacity. Even though these events have had a harsh impact on morale, the remaining work force is dedicated and seems willing to ride out the storm if there is expectation of future success. If the volatility remains much longer, we may see even a sharper reduction in productive capacity. During this unsettled time, our company is losing money and like our employees is looking for indications that stability will prevail in order to continue supplying the U.S. consumer with available energy.

The situation we find ourselves now in is one of great concern. Our domestic production is decreasing as demand is rising.

And we have already indicated some of the other comments of some of the other speakers this morning, so I would skip down and kind of go into what—possibly some solutions.

The long-term solutions to our energy supply problems has to start with the recognition that the problem exists, and the need to address the situation now is very important to our future overall security. The fact that this hearing is being conducted today indicates that you're taking this problem seriously, and I appreciate that.

We have heard comments, and there's quotes from learned people such as Don Hodel, National Defense Foundation, Dr. Harold Brown, that are emphasizing this problem on a national scale now, and that recognition is very taken, and we appreciate that.

Given the desire of OPEC to control oil supplies and prices in the future and the instability that potentially exists with supplies, I, both personally and as representative of the AOSC, share the view that we must act now to preserve our future independence. We cannot afford a complacent attitude.

Many solutions to the problem have been presented in the past months and years ranging from a "free market" hands-off approach to full Government control. In my estimation the answer lies somewhere in between for an industry that is vital to our national interests.

The initial thrust of any action should be to stabilize our domestic production and industry infrastructure to stop the increase of import dependence and rapid deterioration of the industry that is occurring. Until the price of oil is stabilized, the problem cannot be solved. It is estimated that a price in the $22 a barrel area would allow that to take place and reduce the possibility of losing forever some 15 percent of our productive capacity that is in high-cost stripper wells. A price in $25 range would spur exploration activity and help to diminish the drain on our overall reserves. At a $28 level we should see the incentives to actively seek new reserves. Again, this $25 to $28 range is basically where we were from 1982 to 1985 without inflation factored in. An import fee is a quick way to accomplish that stabilization goal and is within the president's current authority. Other industries have been well served recently by imposition of import fees or by securing cooperation from foreign countries to limit exports to the United States that ultimately benefits both countries.

The Association of Oil Well Servicing Contractors supports an import fee, and I have attached a resolution to that effect.

Once this stabilization has occurred, it will be in this country's interest to actively pursue and implement a national energy policy that will address the needs of Americans and provide for energy independence in the future. Conservation with more efficient fuel use is but one very important aspect of this plan. The benefits that should accrue to the country as a whole: Stable energy prices; no gas lines; adequate supplies for manufacturers; the long-term, lower and less volatile rates at the expense of probably some short-term inflation, those are inflammation rates; increased revenue for Government through taxes on production, employment and business; decrease in trade imbalance and deficits; it sends our equity and our jobs overseas; the ability to supply our armed services with energy during mobilization efforts; decrease in pollution problems that we know we are all experiencing in the—particularly in the Northeast by use of natural gas and the abundance that we have there; and probably the most important is our ability to provide for our children and our grandchildren a relatively stable economy and social fabric much like that we have enjoyed with the availability of abundant energy.

This country runs on energy, we all need it, and we all benefit from adequate supplies. In a recent article in MARRIOTTS Portfolio//Fall 1986, Lee Iacocca, the chairman of Chrysler stated that we are the only country in the world that subscribes to the doctrine of "free trade." All others practice a managed trade concept whereby governmental policies provide stability and security for their companies to compete in this global economy. Please remember that Mr. Iacocca was able to effect the largest private industry/governmental cooperative effort that has helped to keep our domestic auto industry viable and competitive. Good government with sound policies and practices is good for the country and its citizens. It is necessary for a stable economy and social order. The answer to our problem lies in a national understanding that we are at risk over future energy supplies coupled with a desire to work out a balance with cooperation from government, industry, and the consuming public to develop a truly national energy policy. We do not approach this in a selfish manner. Our experience tells us that a national energy policy that is good for the oil and gas industry will be one that will be good for Delaware, Connecticut, Massachusetts, Pennsylvania, Maine, and the rest of the country. If the process is not started soon, it may be too late.

The AOSC stands ready to assist in this effort. Our motto is "We keep America's oil flowing" and with the proper incentives will be able to do so for many years to come.

We have assembled outside some 105 idle oil field pieces of equipment. This represents some $15 million in investment, some 300 jobs. They are idle today. They could be out there providing energy to our consuming public. You look around this room and you see this is the oil field. You don't see the J.R. Ewings of Dallas. I think that obviously we have a public relations problem on a national scale. We want to work toward alleviating that, and I think you being here helps that tremendously, and we look forward to continuing success in this effort.

I want to thank you for your concern and interest in an issue that is of utmost importance to our nation.

Thank you.

[The prepared statement of Mr. Snyder follows:]

Statement By Dean A. "Beach" Snyder, Jr.

Before the Senate Committee
on Energy and Natural Resources

Hobbs, New Mexico
February 28, 1987

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

Thank you for taking the time to visit Hobbs and for the interest that you have exhibited for the problems that besiege a vital segment of our national economy and security interests, the energy industry.

I am Beach Snyder, President of D A & S Oil Well Servicing, Incorporated. We have a fleet of 51 mobile well servicing units that are used to pull out of and put into a wellbore the equipment necessary for a well to produce oil and/or gas. This equipment is used to complete new oil and gas wells, perform remedial workovers on existing wells, provide maintenance services on older wells and finally plug and abandon uneconomical wells. We operate in three locations in New Mexico and West Texas. I am also representing the Association of Oilwell Servicing Contractors (AOSC), a national trade association of oil and gas well service contractors and their suppliers operating throughout the United States. This organization presently has 689 members representing approximately 4,050 rigs and tens of thousands of employees. Most of these are small independent companies operating up to 10 units with 50 employees or less. We are but one segment of a vast and complex industry of service and supply that is of significant importance to the production of energy.

Since the first oil price and supply shock of 1973, our industry has expanded to meet the demands of a country wanting energy security at affordable prices. It took us from 1973 to 1981 to more than double our inventory of rigs and manpower to adequately meet the requirements of a growth industry supplying energy needs. This expansion started subsiding in 1982 as prices stabilized and declined slightly and supply and demand came into line. As world production capacity increased oil prices were held up through 1985 by Saudi Arabia being the swing producer. The well servicing industry experienced a contraction but was able to adequately meet the demands of the producers. During this period, prices for our services and wages for our personnel saw a decline. Even though there was some attrition in equipment and personnel, we still had the capacity to service the needs of the consuming public. However, beginning in early 1986 the price of oil started it precipitous dive and our industry has experienced a severe contraction.

The net effect of this on our industry and the nation is that from a peak capacity in the early 1980's of slightly over 8,000 units, for practical purposes the fleet is around 5,500 units now. (These figures are presently being updated by the Guiberson Division of Dresser Industries, Incorporated.) This is due to stacking of rigs and cannibalization for parts to keep costs down, in addition to the departure from the industry of the manpower necessary to run the equipment.

The United States has some 850,000 Oil and Gas wells capable of producing given an economic incentive to do so. The AOSC estimates that it would take some 5,000 well servicing units just to maintain optimum production from those wells. It is estimated that 25% of these wells are currently shut-in due to low oil and gas prices or for repairs that are not economical at today's prices. The demand scenario at $18.00 oil for 1987 indicates a utilization of 3,140 units, an improvement over 1986, but not enough to respond to future demand growth. We are already seeing price deterioration of the $18.00 level. When and if the shut-in wells are re-opened, an additional 1,900 rigs will be required to handle the increased load. If that happens in the short term, the ability of the industry to respond should be adequate. However, if the current atmosphere of volitality lasts much longer, the response time will greatly increase due to a lack of qualified personnel with the necessary experience in a highly specialized industry. In addition, should we have another supply/price shock such as 1979 and need full capacity for increased exploration and production, it would take several years for our suppliers to be able to meet that demand. This would assume that we could attract and train or re-train the additional thousands of personnel that would be needed to operate at increased levels.

I have been speaking of the well servicing industry as a whole but would now like to give you some data concerning our company which is probably representative of a vast majority of the individual firms that make up the industry. Since 1982 we have reduced the price for our services by 23% (41% in real dollars). Our employees have taken a 19% (37% real dollars) cut in wages and benefits over that period. In addition we are now operating at 50% of capacity. We have lost 108 personnel (41%) of which 68 have left in the past year due to the severe drop in activity. Those 68 people alone represented 358 years of experience with our company. Since our company represents slightly less than 1% of the industry, these numbers are very significant on a national basis. It would take many months and perhaps several years to be able to find and/or develop qualified personnel to reach full capacity. Even though these events have had a harsh impact on morale, the remaining work force is dedicated and seems willing to ride out the storm if there is expectation of future success. If the volitality remains much longer we may see an even sharper reduction in productive capacity. During this unsettled time our company is losing money and like our employees is looking for indications that stability will prevail in order to continue supplying the U. S. consumer with available energy.

The situation that we find ourselves in now is one of concern. Our domestic oil production is decreasing as demand is rising. We currently do not have policies in place to arrest this decine. Our reliance on imported energy products has risen to 40% in the past year. Given current pricing and uncertainty over future prices, our imports can expect to increase to 50% by 1990 and higher beyond. In this situation we will find ourselves much as we were in 1973 and 1979 when supply and price disruptions caused severe shortages, gasoline lines and inflation. And as in those years, OPEC, with 2/3 of world reserves, will be controlling the supply and the price.

Long term solutions to our energy supply problems starts with the recognition that the problem exists and the need to address the situation now is very important to our future overall security. The fact that this hearing is being conducted today indicates that you take the problem seriously.

In remarks at a Council on Foreign Relations Seminar, Interior Secretary Don Hodel warned that continuing dependence on oil may be impelling the world toward an unavoidable crisis. His implication was that the pressures within the individual nations of OPEC to increase oil revenues could potentially create domestic unrest in those nations. This could possibly lead the Soviet Union, with declining oil production, to exploit that situation.

With our growing import dependence on OPEC our supplies could be significantly disrupted. In a separate report, the National Defense Council Foundation stated "there can be little doubt that should current conditions in the domestic oil industry persist....within three years the nation may find itself simply unable to meet its liquid fuel needs in the event it is required to bring its defense forces to full mobilization." They go on to state that we will find ourselves dependent on imports for as much as 60% of our oil requirements within three years if exploration and development of more secure domestic reserves is not resumed.

Dr. Harold Brown, in testimony before the Senate Finance Committee on August 13, 1986 stated ".....the dependence of the industrialized democracies (the U.S. less than others) on oil from the Persian Gulf and the Middle East continues, in my view, to pose a long range problem for Western Security."

Given the desire of OPEC to control oil supplies and prices in the future and the instability that potentially exists with those supplies, I, both personally and as a representative of AOSC, share the view that we must act now to preserve our future independence. We cannot afford a complacent attitude.

Many solutions to the problem have been presented in the past months and years ranging from a "free market" hands off approach to full government control. In my estimation the answer lies somewhere in between for an industry that is vital to our national interests. Many concepts are currently under scrutiny and deserve consideration. They include: 1) Repeal of the Windfall Profits Tax; 2) Repeal of the Fuel Use Act; 3) Decontrol of Natural Gas; 4) easing restrictions for exploration on Federal lands and offshore; 5) tax incentives for increased drilling and production that improves cash flow and attracts investment; 6) continue filling the Strategic Petroleum Reserve and; 7) implement an import fee on imported crude oil and products. All are worthy of consideration.

The initial thrust of any action should be to stabilize our domestic production and industry infrastructure to stop the increase of import dependence and rapid deterioration of the industry that is occuring. Until the price of oil is stabilized, the problem cannot be solved. It is estimated that a price in the $22 barrel area will allow that to take place and reduce the possibility of losing forever some 15% of our productive capability that is now in high cost Stripper wells. A price in the $25 range would spur exploration activity and help to diminish the drain on our overall reserves. At a $28 level we should see the incentives to actively seek new reserves. The $25-$28 range is basically where we were from 1982 to 1985 without inflation factored in. An import fee is a quick way to accomplish that stabilization goal and is within the Presidents authority. Other industries have been well served recently by imposition of import fees or by securing cooperation from foreign countries to limit exports to the U. S. that ultimately benefits both countries.

The Association of Oilwell Servicing Contractors supports an import fee as indicated by the attached copy of a resolution from their annual meeting this past summer.

Once this stabilization has occurred, it will be in this country interest to actively pursue and implement a national energy policy that will address the needs of all Americans and provide for energy independence in the future. Conservation with more efficient fuel use will be one very important aspect of this plan. The benefits that should accrue to the country if this is achieved will include:

1. Stable energy supply not subject to severe run-ups in price---NO GAS LINES and supplies

for manufacturing.
2. In the long term, lower and less volatile inflation rates.
3. Increase revenue for Governments through taxes on production, employment, and business.
4. Decrease in trade imbalance and deficits that sends our equity overseas.
5. The ability to supply our Armed Services with energy during mobilization efforts.
6. The decrease in pollution problems that can be realized from utilizing our domestic supply of natural gas.
7. And probably the most important is our ability to provide for our children and grandchildren a relatively stable economy and social fabric much like that we have enjoyed with the availability of abundant energy.

This country runs on energy, we all need it, and we all benefit from adequate supplies. In an article in MARRIOTTS Portfolio/Fall 1986, Lee Iacocca, the Chairman of Chrysler, stated that we are the only country in the world that subscribes to the doctrine of "free trade." All others practice a managed trade concept whereby governmental policies provide stability and security for their companies to compete in this global economy. Please remember that Mr. Iacocca was able to effect the largest private industry/governmental cooperative effort that has helped to keep the domestic auto industry viable and competitive. Good government with sound policies and practices is good for the country and its citizens. It is necessary for a stable economy and social order. The answer to our problems lies in a national understanding that we are at risk over future energy supplies coupled with a desire to work out a balance with cooperation from government, industry, and the consuming public to develop a national energy policy. We do not approach this in a selfish manner. Our experience tells us that a National Energy Policy that is good for the oil and gas industry will be one that is good for Delaware, Connecticut, Massachsetts, Pennsylvania, Maine and the rest of the country. If the process is not started soon it may be too late.

The Association of Oilwell Servicing Contractors stands ready to assist in this effort. Our motto is "We keep Americas Oil Flowing" and with the proper incentives will be able to do so for many years to come.

Thank you for your concern and interest in an issue that is of utmost importance to our nation.

STATEMENT ON OIL IMPORT POLICY

ADOPTED BY

ASSOCIATION OF OILWELL SERVICING CONTRACTORS

Whereas, the United States Petroleum industry is in a crisis, creating a national emergency requiring immediate attention of government;

Whereas, the petroleum producing industry is the largest single business in the United States and throughout the world, and the country's high standard of living is based on large volumes of petroleum products;

Whereas, the Well Servicing segment of the U.S. Petroleum Industry is losing its ability to keep the nation's more than 900,000 oil and gas wells flowing, and domestic drilling and production have reached an all-time low and not replacing this nation's petroleum reserves;

Whereas, the United States trade imbalance continues to widen due to increased oil imports and a weaker dollar to pay for these imports;

Whereas, National energy security goes beyond the price of gasoline,and the domestic oil and gas industry must survive and grow if America is to maintain its premier position in the world and not dissipate its wealth through purchase of excessive amounts of foreign products;

Whereas, the domestic oil and gas industry is being deliberately destroyed by foreign sources dumping unrealistically priced crude and refined products in the United States, which can only be controlled through tariffs or quotas; therefore

Be it resolved that the Board of Directors of the Association of Oilwell Servicing Contractors, on this 23rd day of July, 1986, supports a new national energy policy that includes in import fee to be applied to crude oil and petroleum products imported into the United States.

Senator BINGAMAN. Thank you, Beach.

We will go ahead with our final witness on this panel, Fred Schlicher, who is the vice president of the Independent Petroleum Association in New Mexico. He's an independent oil and gas producer and a petroleum landman.

We're glad to have you here, Fred.

STATEMENT OF FRED J. SCHLICHER, VICE PRESIDENT, INDEPENDENT PETROLEUM ASSOCIATION OF NEW MEXICO

Mr. SCHLICHER. Thank you, Senator.

Being the last on this panel is a great advantage for me and for you, because I'm going to talk about some things that were not covered by the other speakers, but leave areas that I was going to cover, that they have very adequately covered, out. You have my written statement of course.

The Independent Petroleum Association of New Mexico represents around 600 small independent producers, whether they be a company, or whether they be an individual, or whether they be a royalty owner, that are active in New Mexico. Now, last year, we have seen a reduction in our active membership in excess of 30 percent.

The two areas that have not been covered, I guess in an adequate manner that we would like to present, the association would like to present, as far as additional things that ought to be done or considered to be done, one is in the area of natural gas.

Now, I know Senator Domenici shared very, very effectively about how that Fuel Use Act has got to be removed. We've got to to get rid of that thing. But I would like to go a little bit further and chat about a couple of other things. The ratemaking policies of the FERC relative to pipelines, we feel very, very strongly needs some rather major overhauling. Now it's very possible that Chairman Hesse's, and what we consider to be commendable, efforts and initiatives concerning notice of inquiry may go a long way to helping to bring some more fiscal reponsibility and efficiency to the pipelines. But I would implore all of you sitting up there very, very strongly to ensure that they result, those efforts and those initiatives, in three things. One, that there is an ending to discriminatory pipeline "affiliate" practices. Two——

Senator DOMENICI. Would you state that one again, please?

Mr. SCHLICHER. There is an ending to discriminatory pipeline "affiliate" practices. Two, overturning of all rate preferences that currently exist for Canadian gas suppliers. Three, an implementation of nondiscriminatory pipeline transportation of all domestic including "gathering systems" as is intended under Order 436. And as far as independent natural gas producers are concerned, that intention has not been achieved.

In the area of Federal lands, and this, of course, I now move to, specifically, the Bureau of Land Management. Since the Federal Government in this State controls and manages at least one-third of not only the surface area but of the overall production and potentially productive acreage in this State, we think it's vital that that agency become truly accountable to the will of not only the administration, but be accountable to Congress. And I would like to cover two examples that I think just absolutely clearly indicate how this has not been achieved as far as this agency is concerned.

All of you personally I have either talked to or worked very, very closely with your staff concerning "FOGRMA" and the results that came down with that. And without going into a lot of detail, I want to touch on that, (1) the capability within the organization to effectively come up with regulations in a real world environment that will implement the will of Congress, a law, is seriously lacking. They do not have the professional expertise at this point in time to do that. And, (2) I would like to point out, I don't believe they have the will to do that or the desire. And I don't know how to say it any other way than, frankly, they haven't done it. If they want to take a step from more of a national standpoint now, take a look right here in our own backyard; right here. We look at the Carlsbad Resource Management resource plan that is currently in the throes, and when I say "throes," I'm talking about an extremely serious battle between industry and the Resource District here. We have a situation where, what we would consider an antiresource development philosophy is being foisted on a land situation that we are trying to develop here and operate in the State. To take that one step further, although—and then—and I might add, this is all in light of very, very clear, I feel, administration policy that's tells the Bureau, tells the Department of the Interior "Get off industry's back right now. Don't nitpick them. Let them get out there and do the job they can do."

Thank you very much.

[The prepared statement of Mr. Schlicher follows:]

Statement made by Fred J. Schlicher, Vice-President of the Independent Petroleum Association of New Mexico, on behalf of the Association to the Senate Energy and Natural Resources Committee Senator Jeff Bingaman Chairman. Oil and Gas Industry Oversight Hearing held February 28, 1987 in Hobbs, New Mexico.

The Independent Petroleum Association of New Mexico is an industry organization that has a membership of over 600 independent oil and gas producers and royalty owners currently active in New Mexico. In the last 12 months, our organization's active membership has dropped over 30%. The independent oil and gas producer, along with drilling contractors and service companies, are hardest hit in the industry by the severe declines in crude oil and natural gas prices. The short term future of the independent oil and gas producer, a vital part of New Mexico energy development, is bleak at best. Our Association firmly believes that a healthy and efficient domestic oil and gas industry is vital to our nation's future and calls for the following actions relating to natural gas, crude oil and federal lands, to prevent further unacceptable reductions to domestic oil and gas production.

A. NATURAL GAS

(1) Repeal the Fuel Use Act which will allow the marketplace to determine what fuel is burned in our power plants. This will mean additional California markets for New Mexico producers.

(2) Reform FERC rate-making policies for pipelines to make pipelines more fiscally responsible and efficient. Ensure reasonable

transportation rates and gathering fees (tariffs) are established under Order 436.

(3) Continue to encourage FERC Chairman Hesse's commendable initiatives. Work to ensure that they result in:

(a) Ending discriminatory pipeline "affiliate" practices,

(b) Overturning all rate preference to Canadian suppliers,

(c) Implement nondiscriminatory pipeline transportation of all domestic gas including "gathering systems" as intended under Order 436.

B. CRUDE OIL

(1) Aggressively pursue those initiatives (senate bills) introduced and/or supported by our New Mexico U. S. Senators Jeff Bingaman and Pete Dominici that provide for the repeal of the Windfall Profits Tax, Income Tax Amendments relating to domestic oil and gas production and Excise Tax on imported crude oil.

May I parenthetically note concerning the oil import fee issue, a very controversial issue within the oil and gas industry, that the Independent Petroleum Association of New Mexico could only support a bill that would universally apply to all foreign nations oil and that would phase out when price stability was re-established. Both Senators Bingaman and Dominici bills do this.

(2) Convince the Reagan Administration that the current crude oil price instability can and will catastrophically weaken

our domestic production capability.

C. FEDERAL LANDS

Since the Federal Government manages over 1/3 of all of the production and potentially productive lands in New Mexico, its activities significantly effect our industry's operations. The Bureau of Land Management, a subdivision of the Department of Interior, is tasked with the duty of implementing the laws enacted by Congress and the policies and directives of the Administration. Currently, the Bureau of Land Management lacks the capability and the will to satisfactorily implement these laws and directives on the national and state level. On the national level, recent industry experience connected with Bureau of Land Management regulations for implementing the Federal Oil & Gas Royalty Management Act of 1982 "FOGRMA" vividly demonstrates how the Bureau lacks the oil and gas professional expertise to prepare viable real-world operating procedures and how brazenly it will exceed the limits of authority granted in the law to further its own bureaucratic agenda. On the state level, in the Carlsbad Resource Area (Lea, Eddy and Chaves Counties), industry is battling against an incredible onslaught of new uncalled-for and unnecessary resource protection regulations that reflect certain local Bureau of Land Management employee's anti-resource development inclinations and not mandated legislative initiatives. These regulatory actions are in direct violation of recent Department of Interior directives calling for increased development of federal mineral resources and a reduction of industry regulatory burdens. The Bureau of Land Management must become more accountable to Congress and the Administration.

Senator **Bingaman**. Thank you very much.

Let me just ask a question here, and then defer to my colleagues. I'm interested in this issue which several of you have raised about the problem of reversing the declining production trends. What steps need to be taken to do this? Charles Perry makes the point that in order to maintain the current level of production we need to have 3,000 to 3,500 rigs operating. You're also indicating that if we were to get a price of $22, we would only have 1,700 rigs operating. So it seems to me we have identified a very serious difficulty in trying to reverse these production trends. I guess what I'm hearing from you and Bob Anderson and some of the others is that the declining production is very much embedded into what's going on today and it's going to take dramatic action to reverse or even stabilize the situation at the current levels. I would be interested in any additional thoughts any of you have on this and the lag time that might be required in order to gear up production again, if and when the price does go up again. I think we are talking about a much longer lag time to get production up than we've had in previous situations of decline. Charles, maybe you have some thoughts on that, or maybe Bob Anderson, or anybody else.

Mr. **Perry**. Thank you, Senator.

I think you have described it as well as I could, but it's a complex problem. It will take several steps to achieve the level that we feel should be our goal. The lag time, I'd like to mention this, what I tried to point out in my testimony is the level of confidence in the industry. We cannot achieve that drilling rig level without some outside capital sources, we've got to have a renewal of the confidence in the industry to make money, to return an adequate return to our investors, to be able to pay off our bankers, before we're ever going to be able to bring the money back. That's important.

Senator **Bingaman**. I gather from your comments that you see the need for a minimum price and an import fee as essential to stabilize that price in the future so that the confidence can return. Is that——

Mr. **Perry**. I think that's even more important than the price itself. In other words, if we knew the price were $18, there's a certain rig activity that will occur at that point. Really, the price we have now should support more than 800 rigs, but nobody wants to stick their neck out because it may not be $18 or $16 oil; it may be eight dollar oil by the summer; and nobody is willing to take that kind of a risk today.

Senator **Bingaman**. Bob, did you have a comment on that?

Mr. **Anderson**. Yes, sir. Mr. Chairman, on the first item you brought up in reversing the decline, I think what we're going to have to have there are, not only considering the import tax, but also removal of those other acts that are causing our industry not to be able to put in the capital investment we need. For example, the Fuel Use Act, we need to decontrol control natural gas prices; and, of course, we need to repeal the windfall profits tax. But I know under the current oil prices, here in Lea County, there have been a number of projects that just can't be sustained at the present rate. We're going to need I think in the range of $25 a barrel or more to really put in these major projects that are going to generate the kind of reserves that our state needs and that our nation needs. And we've got to find some measures that will allow this type of capital investment to be plowed into our industry. And it's going to—we're going to have to look at a lot of different options and all, but that's what it's going to take to protect our national security.

Senator BINGAMAN. Thank you very much. Fred, did you have a comment?

Mr. SCHLICHER. Yes. From an independent perspective, and kind of dovetail this into what Mr. Perry said, if the investment dollars, if they were out there right now, and that's a big question right now, because they're not, but if they were available, and if the professionals, as far as the petroleum engineers and the geologists that are qualified, if they existed also at that time, from an independent perspective, we're still talking, when you talk about lag time, from one to three years in order for the types of what we call prospects, the ideas, to be developed, the acreage to be acquired, and the contracts and the money to be raised. So—now some of that could occur together. In other words, as the money was—as investor interest started to come back, of course maybe then some of the training evolve. But I'm saying right now, nothing—virtually nothing, is being put together at all out there in New Mexico; and this is what is so vital to the state of New Mexico because the independents drill so many wells and are so, so active out here. To be real frank with you, we feel New Mexico is an independent play; the whole state is. And it's the type of place that we used to flourish and we hope we can again; but I think anytime you look at figures on how long is it going to take us for us to pick up the slack and get back in there and begin developing prospects again, well, you have to add one to three years to whatever that is because, right now, none of these prospects are being put together.

Senator BINGAMAN. Thank you very much.

Senator Domenici.

Senator DOMENICI. Mr. Chairman, I was just thinking as we talk about this issue and you also urge us to make sure our country finds out about the problem, I was thinking back to only ten years ago when New Mexico didn't know we were an oil and gas state. Only you did down here. I came from Albuquerque, and I recall the Albuquerqueans didn't know we were an oil and gas state. As a matter of fact, they were very angry at me because, when you first elected me, the national journals immediately put me in the column with those other senators who were oil and gas State senators, and I got a lot of mail saying "Who do you represent?" you know, from the other part of the State. But we surely have New Mexico convinced that oil and gas is important, and we have them convinced that it's vital to our future, to New Mexico's future, and I think it's only a matter of time that we're going to get this nation convinced that this problem is a desperate one.

Now, let me ask you if I read you right, Charlie and Bob. I asked somebody to plot the dollars per barrel and the amount of money invested in exploration and development, and I found an interesting thing. If—on the way up, before we had this last two years of chaos and confusion, which you have led us to consider now, this plot would show that when oil was $25 a barrel—interesting—40—$40 billion was being invested in exploration and development in the United States. That's what this shows. Now, obviously when it got up a little higher, it really went—it spikes very big, but I'm talking about today's times. But now look here on the down side, how it has changed dramatically when it's—when it gets down here to about 18, apparently we begin to feel two things, that isn't high enough for there to be enough profit, for there to be enough risk taking, but it also seems, on this down side, that people aren't very confident because the ratio is way off. You know, at that price we ought to have somewhere around 30; but if this is correct, we have about 23 billion instead of an added 10 billion that would have been there on the up side when people were acting with a bit of confidence. So I think it is actually proven in the market place, somebody went out there and got the independent producers and the body of information and that showed up in that manner.

I want to show you another one. A lot of Americans say that the rate of return to the oil and gas industry has nothing whatsoever to do with whether they're going to go out and find oil. That's a real phony statement by them. Just look at this. That red is the way it goes up as the ratio of profit goes up, and when the ratio of profit hits here, about 15 percent, the investment in the industry is way up here because they put almost all the money back in R&D. Now, coming on this down side, you see what's going to happen over here; because profit ratio is so small, this exploration and development thing is about to go off the chart. So anybody that doesn't really think it has anything to do with price and that somehow or another those were some figments of big oil's imagination just aren't looking at reality.

Let me ask just one question. Did I hear most of you to say that if we had to do something in the next month, we had to go to the President, if we had to take a delegation up there to talk with him about doing something, that the most important single thing we could do would be an import fee? Is that a concurrence of everyone there?

[All panel members answered affirmatively.]

Senator DOMENICI. All right.

Senator BINGAMAN. Thank you. Congressman Skeen.

Mr. SKEEN. Thank you, Mr. Chairman. And I think it was one of the most interesting dissertations on this situation that I've heard in a long time.

By the way, Fred, regarding the Carlsbad Resource Area situation, I understand there's been a slight improvement?

Mr. SCHLICHER. Yes, sir.

Mr. SKEEN. Someone who was there with a great presence is no longer there or isn't going to be there. Go ahead and clap if you want to. I think when you get some response from government once in a while, it's worthwhile to note it because they are few and far between sometimes.

One thing I would like to ask the whole group there, I noticed when Charles Perry and some of the rest of you talked about partial production and stripper wells, and so forth, that they are such an important part of this issue that you can't ignore it. And we're hearing that, as this price has gone down, they're closed down or shut out or so forth. There's one other thing that no one touched on, and that is that there has been some trading of production going on amongst producers buying from other producers. Is this an element or not significant, or what is the situation in that area? Has there been some production trading going on?

Mr. ANDERSON. Mr. Chairman, certainly some of the major companies are divesting themselves of some of these marginal properties; and, certainly, an independent producer, perhaps, can operate that well to a lower level and maintain those reserves for a little longer; but that's still not the answer to our lack of oil production. It's going to have to come from higher price. And maintaining the strippers is part of the help, but there's got to be some way to stabilize the price and increase investment in the oil industry.

Mr. SKEEN. Bob, I think that's a good observation, and I wasn't asking the question as one of the solutions to this problem. What I'm saying is, we talked about confidence; and what I was trying to get an indication from you folks who are in the producer area, particularly the independents, just how much confidence is there amongst some of those who are looking, or betting on the cum, because they know they can't produce them. If you can't produce them, they're not going to produce them much better. There is some margin there, but I just wondered to any degree at all it's affected. Is there that much trading going on as far as production, betting on the cum, so to speak?

Mr. ANDERSON. Well, I know that, speaking for Chevron, we're planning on staying in New Mexico. We've got a lot of projects we're planning and I think that pretty well summarizes our position.

Mr. SKEEN. You have let some production go that——

Mr. ANDERSON. We have——

Mr. SKEEN. Sold it.

Mr. ANDERSON. We have divested a small amount, but we're planning on staying here. We think that New Mexico offers great opportunities for our company and for our nation, and if we can just get the investment back and with the help of folks like you and Senator Bingaman and Senator Domenici, I think we can surmount this problem and return our county and our state to some of the glory days that we've had in the past.

Mr. SKEEN. Thank you. Does anybody else want to comment on—yes.

Mr. SCHLICHER. Yes, Joe. I think from an independent perspective, there has been—I don't know what the percentage would be—considerable trading of production around, or acquisition. I don't believe the majority of it has anything to do with contraryism or someone believing that they can make a purchase on the cum, so to speak. I think what you find most of it is, is simply independents that may have acquired a considerable debt problem have got to liquidate in one shape, manner, form, or another to resolve some of those debt problems. And that generally seems to be the majority of the motivation for why, at least from the independent perspective, why these properties are put up for sale; it's simply to do that.

Mr. SKEEN. That's what I wanted to do, was clarify the picture on that thing. Yes, Charles.

Mr. PERRY. The most recent copy of the Oil and Gas Journal reported that the average sale price for production in the ground was, I believe $6.45 a barrel. The number of sales have gone up considerably in 1986 compared to prior years; but I think it's significant that that is a dedication of capital that doesn't generate any more reserves. That money could have well been spent in new production, except they can buy cheaper than they can drill for new production, and they have a better return on the purchase production than they do on new production. Again, we're back to Economics 101 that Senator Domenici talked about, the investment capital will follow the path to the best return.

Mr. SKEEN. Very good. Thank you, Mr. Chairman.

Senator BINGAMAN. Thank you. I want to thank this panel very much.

We have one final panel, which I would like to invite up at this point. Robert Harbor; Charles Johnson; Fred Hansen; Charlie Smith; and Velma Wiseman. If they would all come forward, please.

Let me go ahead and, once again, refresh all the witnesses' memory that we would like, if possible, to have a summary of your testimony and just hit the highpoints.

Our first witness is Robert Harbor, who is the vice-president of El Paso Natural Gas Co. and, Bob, we're glad to have you here today.

STATEMENT OF ROBERT N. HARBOR, VICE PRESIDENT, EL PASO NATURAL GAS CO.

Mr. HARBOR. Thank you very much, Mr. Chairman, Senator Domenici, and Congressman Skeen.

It's my pleasure to be here today representing El Paso Natural Gas Co. I come here to bring you maybe a slightly different perspective from some of the others you've heard. However, I might add, that most of the testimony given here this morning is testimony with which I can wholeheartedly agree.

Let me, if I may, indulge you for a moment to bring you up to date on what's going on in the natural gas pipeline business. As most of you know, the natural gas industry, particularly the pipelines, have historically been pervasively regulated from the wellhead to the burner tip. Regulation, unfortunately, as we all know, usually trails reality. As a result, the natural gas industry has swung from severe shortages in the 1970's to the present day surplus.

The gas supply surplus in El Paso's service area, which is 80 percent comprised of Caifornia, has been exacerbated by a precipitous decline in the market for natural gas. Reduced market demand largely results from the increased availability of nuclear and hydro power, unseasonably warm weather out in the California area, and some switching from gas to lower price fuel oil by industry and by electrical utilities. And I guess I might add here that we've also been subjected to some unfair competition from Canadian gas, which has been brought on, to a large extent, by the large California consumers who have affiliated pipelines going up into Canada.

To further complicate the already difficult economic situation in the industry, we're also undergoing a structural change. Recent orders from the Federal Energy Regulatory Commission have radically changed the natural gas business, transforming the pipeline's traditional merchant role and greatly increasing its business risk. Foremost among changes are Orders 380, 436 and 451. And I'll not bore you by going into a lot of detail on some of these, but I think it's important we understand the general impact.

Order 380 abrogated the pipelines' contractual right with its distribution customers to collect through a "minimum bill" a portion of its cost of standing ready to serve the customers' gas needs, day in and day out, 365 days a year, year after year. This action undercut the traditional financial relationship between the pipeline and its customers which had heretofore partially underwritten the pipeline's ability to acquire, aggregate and hold in inventory the long-term gas supplies required to meet its customers' market demands. In effect, Order 380 left the pipelines with all of the risks associated with the inventories they have put together over many years to enable them to meet the customers' service obligations.

More recently the FERC has issued Order 436 which established a system of open access transportation for interstate natural gas pipelines. Simply stated Order 436 permits pipeline customers to unilaterally sever their contractual obligations to buy gas from their pipeline suppliers in favor of gas supplies from other sources and requires the pipelines to transport the other supplies to market.

You might say we're caught in the worst worlds, with an obligation to serve and retain an inventory of gas for customers who no longer have an obligation to purchase. This, of course, is a tremendous windfall for our customers who have the best of both worlds. In effect, pipelines and their producer/suppliers have been left holding the bag. Thus far, the FERC has done nothing for either, leaving them to try to rearrange their relationships as best they can through negotiations and litigation in order to work out their differences.

El Paso has successfully negotiated a mutually satisfactory resolution to the take-or-pay problem and other contract differences with many of its producers and is trying to do so with others. Nevertheless the problem of supply contracts entered into before the FERC's orders took place reduced the pipelines merchant role and are, without a doubt, the largest unresolved issue confronting the natural gas industry. This is the principal obstacle standing in the way of a workably competitive commodity market for natural gas and open access transportation through the national pipeline grid.

Recent indications that the FERC has recognized the severity of the take-or-pay problem are encouraging. However, the specific approach which was discussed in the most recent FERC public meeting, and which a majority of the commissioners apparently now support, was disquieting at best. We are—as we understand it, the proposal, the pipelines would have to agree to bear at least 50 percent of prudently incurred costs for their take-or-pay obligations and, again, we see that the pipeline and the producers are left to bear the lion's share of this problem. El Paso views the proposal with alarm and considers it arbitrary and inappropriate to the problem. Prudently incurred costs should be fully recoverable for those customers on whose behalf the pipeline acquired the present long-term gas inventories, but who are not now taking that gas. The little known fact is that pipelines make not one penny off of the gas they acquire and retain for their customers' use, and it's strictly a flow-through item.

To identify the recent FERC orders of pipeline take-or-pay as the largest problem does not mean that there are not others. There are. Most occur because our natural gas pipeline systems were not designed or equipped to perform the functions they are now called upon under open access transportation.

For example, the volume of transportation service has grown. El Paso has encountered certain serious and recurring operational problems relating to the control of its pipeline system. Specifically we've discovered that nominations of transportation volumes by shippers on the system, and actual deliveries to suppliers, are not well synchronized. As a result, we're receiving information that scheduled transportation volumes are being tendered and delivered into the system when actual measurement does not verify or confirm the shipments. The controls at present are not capable of permitting us to confirm on a real time basis that the scheduled transportation volumes tendered to us are in fact being delivered to the customers.

We are also now attempting to determine if the operational problems, which have been serious enough on occasion to threaten our ability to render reliable sales and transportation service, are a temporary phenomena associated with periods of abnormally cold weather, the result of rectifiable lack of coordination between the shippers and suppliers, or are related to deliberate attempts by some shippers and suppliers to "swing on the El Paso system" in an effort to "arbitrage" at a time of rapidly fluctuating spot gas prices.

In order to deal with the entry of low cost spot gas into our market, El Paso has moved vigorously to stay competitive with its own supplies. Over the last three years we have had to reduce our work force by approximately 30 percent. We are upgrading and modernizing our system to obtain the most efficient use of our assets. We're constantly reviewing our operations in light of the changing nature of our business and our role as a supplier and transporter to assure that we remain competitive. This, of course, is a two-edged sword to the local governments that might suffer the loss of payroll or tax base, and we have heard some about that already. It's a difficult situation at best.

In addition to assuring efficient operations, market conditions also require that we be attentive to gas costs to remain competitive. We've been forced to market out under our gas purchase contracts where we have the right to do so, including those contracts with our affiliated company Meridian Oil. We have offered to release producers, that would otherwise be shut in, for lack of market for El Paso sales gas, so that they can sell their gas in the spot market, and a great many producers have availed themselves of this option. We have adopted a system of producing our gas on a least cost by pool basis and we have aggressively sought out markets for our system supply gas. None of these things, I might add, have been carried out without some element of controversy and difficulty.

The market, however, is becoming more and more skewed toward transportation and away from sales gas, so much so in fact that El

Paso's ability to take so-called "nonswing" casinghead gas is now threatened. Not to do so, of course, would cause oil production to be shut in. And we are now working with our major customers trying to arrange for a minimum level of takes to ensure that this does not happen.

I might add, we've just undergone a series of meetings out in California over the last few days in an attempt to reconcile this problem. I am sorry to say that I, this morning, do not know whether those attempts have been successful.

We remain concerned that our customers are not recognizing the true long-term costs of overreliance on the spot market. And to look into the problem, El Paso commissioned a study by Charles River Associates of Boston. That study indicated that the buyers in the commodity markets where there is a choice between long-term and "spot" has traditionally selected a mix of two-thirds long-term and one-third short-term.

The study also showed that spot market prices rose much higher once the period of shortage was over.

All of the aforementioned regulatory changes at the federal level triggered similar actions by state regulatory bodies. Specifically, the California Public Utilities Commission is now conducting hearings to implement its decision on the restructuring of the California natural gas industry.

I might add, I'd like to compliment Bill LeMay for representing the state of New Mexico in those hearings out in California last week. New Mexico's involvement in California cannot be overemphasized. We encourage it with all the effort that we can muster to keep that effort up.

Essentially what the CPUC is trying to do is to divide the market in California into noncore and core segments, with a core segment essentially being residential and small commercial use; the noncore segment would be larger commercial and industrial users. There would be comprised of each one of these segments both a spot supply and a long-term supply. The effect of this, of course, would be to institutionalize the spot market; but it also holds the prospect for the development of a more reasoned and rational approach to recognizing the value of long-term gas supplies than we're now experiencing.

One of the major issues that stands in the way of a fair and rational market is unfair competition through the use of tilted rate designs, and we've heard reference to that by some of the other speakers. El Paso and the New Mexico producers have been victimized by this practice, particularly with respect to the "as billed" mechanism for pricing gas imported from Canada. The FERC is to be commended for its recent decision in a Natural Gas Pipeline of America case where it effectively held that rate designs for pricing Canadian gas by U.S. pipelines to U.S. consumers should be no different than those utilized in pricing U.S. gas to U.S. consumers. We ask that you urge the FERC to stand firm on this decision on rehearing.

On a more positive note, there are several things which can be done to place more New Mexico produced gas in the market. I would first call to your attention the application filed with the FERC for El Paso and Transwestern Pipeline Co. for approval for the Mojave pipeline project. Mojave will be a new pipeline tied to the existing El Paso and Transwestern systems in Arizona and extending into the Kern County area of California to provide service to the rapidly developing enhanced oil recovery market. This is the largest developing market in the country and it offers the prospect of up to 600 million cubic feet per day or more of market potential. Of the projects that are competing for this new load, Mojave offers the best and maybe the only hope for selling more New Mexico produced gas in this promising market.

There are also opportunities for moving gas to market through the creation of producer cooperatives. However, congressional action providing for limited antitrust exemptions is probably required to ensure that this activity can be successfully implemented. The co-op arrangement would be particularly beneficial to small producers who could use the cooperative to aggregate their supplies into marketable blocks.

Finally, gas markets could be improved by the removal of existing marketing constraints imposed by the Fuel Use Act and incremental pricing. Also, El Paso would support repeal of the windfall profits tax. An outright repeal of these provisions would ensure that natural gas could compete in the market place strictly on the basis of price.

And I might add, the Interstate Natural Gas Association, which El Paso is a member of, also supports an oil import fee.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Harbor follows:]

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

Statement of Robert N. Harbor
On Behalf Of
El Paso Natural Gas Company

Hobbs, New Mexico
February 28, 1987

Mr. Chairman, members of the committee, my name is Robert N. Harbor, Vice President of El Paso Natural Gas Company. I appreciate the opportunity to appear before you today.

El Paso Natural Gas Company is an interstate pipeline company purchasing and transporting natural gas from the major gas supply areas of Texas, Oklahoma and New Mexico to markets in Texas, New Mexico, Arizona, Nevada and California. Sales and transportation services to markets in the state of California account for approximately 80% of our business.

The natural gas industry has historically been pervasively regulated from the wellhead to the burner tip. Regulation unfortunately usually trails reality. As a result the natural gas industry has swung from severe shortages in the 1970's to the present day surplus.

The gas supply surplus in El Paso's service area has been exacerbated by a precipitous decline in the market for natural gas. Reduced market demand largely results from the increased availability of nuclear and hydroelectric power, unseasonably warm winter weather, and some switching from gas to lower priced fuel oil by industry and electric utilities.

To further complicate an already difficult economic situation the industry is undergoing structural changes as well.

Historically, El Paso and other interstate pipelines have primarily performed the so-called "merchant role"; buying natural gas in the field, processing it to pipeline quality, transporting it to the market place and selling it to local distribution companies and to direct end users.

Following the gas shortages of the 1970's, the wellhead price provisions of the Natural Gas Policy Act of 1978 induced producers to return to the business of looking for gas. El Paso and all other interstate pipelines aggressively competed for the new supplies to restore their depleted supply inventories.

Recent orders of the Federal Energy Regulatory Commission have radically changed the natural gas business, transforming the pipeline's role and greatly increasing its business risks. Foremost among these are Orders 380, 436, and 451.

Order 380 abrogated the pipelines' contractual right with its distributor customers to collect through a "minimum bill" a portion of its cost of standing ready to serve the customers gas needs, day in and day out, 365 days a year.

This action undercut the traditional financial relationship between the pipeline and its customers, which had heretofore partially underwritten the pipelines ability to acquire, aggregate and hold in inventory the long term gas supplies required to meet its customers future market demands. In effect, Order 380 left pipelines with all of the risks associated with the inventories they have put together over many years to enable them to meet their service obligations.

More recently the FERC issued Order 436 which established a system of open access transportation for interstate natural gas pipelines. Simply stated Order 436 permits pipeline customers to unilaterally sever their contractual obligation to buy gas from their pipeline suppliers in favor of gas supplies from other sources and requires the pipeline to transport the other supplies to the market. The pipeline is required to transport the gas for others, even if it reduces the market for gas from its own sources of supply. If a pipeline transports gas for any shipper, Order 436 requires it to be an "open access" carrier for all.

El Paso has been operating under Order 436 since January 1986. Our customers were quick to jump on the opportunity this has presented. Transportation now accounts for substantially more than two-thirds of our total business.

As I said a moment ago, these FERC orders have abrogated the customers' contractual obligations to purchase gas from their historical pipeline suppliers. Ironically, The Commission professes an unwillingness or even an inability to "interfere" with the pipeline producer contract. As a result El Paso is now confronting substantial take-or-pay claims from its producers.

You might say we are caught in the worst of both worlds, with an obligation to serve and retain an inventory of gas for customers who no longer have any obligation to purchase. This, of course, is a tremendous windfall for our customers who have the best of both worlds. In effect pipelines and producers have been left "holding the bag." Thus far, the FERC has done nothing for either, leaving them to try to rearrange their relationships as best they can through negotiation and litigation to work out their differences.

El Paso has successfully negotiated a mutually satisfactory resolution to the take or pay problem and other contract differences with many of its producers and is trying to do so with others. Nonetheless the problems of supply contracts entered into before the FERC's orders reduced the pipelines' merchant role are without doubt the largest unresolved issues confronting the natural gas industry. This is the principal obstacle standing in the way of a workably competitive commodity market for natural gas and open access transportation through the national pipeline grid.

Recent indications that the FERC has recognized the severity of the take-or-pay problem are encouraging.

However, the specific approach which was discussed at the most recent FERC public meeting and which a majority of the commissioners apparently now support was disquieting at best. As we understand the proposal, the pipelines must agree to bear at least 50% of prudently incurred take-or-pay buy-out or buy-down costs in order to directly bill their customers for the remaining costs. Alternatively, pipelines could seek to recover all of such costs, but only through the commodity portion of such rates which would drive up such rates, thus making their sales gas even less competitive with low priced spot gas. El Paso views this proposal with alarm and considers it an arbitrary and inappropriate approach to the problem. Prudently incurred costs should be fully recoverable from those customers on whose behalf the pipelines acquired their present long-term gas inventories, but who are not now taking that gas.

Another recent FERC order which bears mention is Order 451 which give producers the unilateral right to ask for an increase in price, up to the maximum price allowed for post 1974 NGPA section 104 gas, or, absent agreement with the purchaser, obtain permanent release from the contract. Again this would be accomplished without reducing the pipelines obligation to serve its customers.

To identify the recent FERC orders and pipeline take-or-pay as the largest problem does not mean there are not others. There are. Most occur because our natural gas pipeline systems were not designed or equipped to perform the functions they are now called upon to perform under open access transportation.

For example, as the volume of transportation service has grown, and particularly over the last few months, El Paso has encountered certain serious and recurring operational problems relating to the control of its pipeline system. Specifically El Paso has discovered that nominations of transportation volumes by shippers on its system, and actual deliveries by suppliers to these shippers, are often not synchronized. Thus, El Paso is receiving information that scheduled transportation volumes are being tendered and delivered into the system when actual measurement does not verify or confirm the shipments. El Paso's existing control systems were not designed for these confirmation purposes. The controls at present are not capable of permitting El Paso to confirm on a real time basis that the scheduled transportation volumes by various interest owners at each of approximately 17,000 receipt points each day are in fact actually being delivered into the system, reasonably contemporaneously with the scheduled redelivery of those volumes out of the system. When parties do not perform, our customers continue to look to El Paso to make good the untendered deliveries from its own system supply. Because of low sales from system supply and high transportation volumes, balancing these volumes becomes very difficult.

El Paso is now attempting to determine if these operational problems (which have been serious enough on occasion to threaten El Paso's ability to render reliable sales and transportation service) are temporary phenomena associated with periods of abnormally cold weather, the result of a rectifiable lack of coordination between shippers and their suppliers, or are related to deliberate attempts by some shippers and/or their suppliers to "swing" on El Paso's sales gas in an effort to "arbitrage" in a time of rapidly fluctuating spot gas prices. Further, and in any event, El Paso has already committed several million dollars to initiate a program to permanently and substantially upgrade its own system control capabilities through installation of additional real-time telemetry equipment, and continues to review other possible remedial measures.

El Paso's shipper and sales customers are generally aware of El Paso's operational problems, and that El Paso will require their cooperation in developing a workable, cost-effective solution. El Paso believes that such a solution can be achieved, but only if all parties are willing to cooperate.

In order to deal with the entry of low cost spot gas supplies into our market area El Paso has moved vigorously to stay competitive with its own supplies. Over the last three years we have reduced our workforce by approximately 30%. We are upgrading and modernizing our system to obtain the most efficient use of our assets. We are constantly reviewing our operations in light of the changing nature of our business and our role as a supplier and transporter to assure that we remain competitive.

In addition to assuring efficient operations market conditions also require that we be attentive to gas costs. We have exercised market out under purchase contracts where we have the right to do so including those contracts with our affiliated company, Meridian Oil. We have offered to release producers who would otherwise be shut in, for lack of market for El Paso sales gas, to sell their gas in the spot market, and a great many have chosen to avail themselves of this option. We have adopted a system of producing our gas on a least cost by pool basis and we have aggressively sought out markets for our system supply gas.

All in all I believe we have been able to maintain the market share traditionally served by the El Paso system through a combination of transportation gas (including predominately released gas) and traditional system-supply gas. The market, however, is becoming more and more skewed toward transportation and away from sales gas, so much so in fact that El Paso's ability to take so called "non-swing" casinghead gas is now threatened. Not to do so, of course, would cause oil production to be shut in. We are now working with our major customers to try to arrange for a minimum level of takes to insure that this does not happen.

We remain concerned that our customers are not recognizing the true long term costs of over-reliance on the spot market. To look into this problem El Paso commissioned a study by Charles River Associates of Boston. The study indicates that buyers in commodity markets where there is a choice between long-term and "spot" purchases have traditionally selected a mix of two-thirds long-term for price and supply security and one-third short-term or more economical purchases (with variation from one market to another). These buying practices were made "notwithstanding significant premiums for the long-term supplies," the study shows. In our market area today, our customers are buying significantly less than one-third of their supplies as long-term gas and the rest as spot, a much higher reliance on the spot market than the Charles River Associates study noted for purchasers in other commodities markets.

The study showed that spot market prices rose to much higher levels above the price for long-term supplies during periods of scarcity, periods foretold by the present day decline in natural gas exploration and development. El Paso feels that failure to learn from the historical buying practices of other commodity markets could mean sharply increased costs for natural gas consumers in the future. Quite frankly, we do not think that our customers present over reliance on unreliable spot supplies is either responsible or sustainable over the long term.

Natural gas is in a period of excess deliverability which has led to a lack of supply development. Drilling is at an all-time low and the country is using up its developed inventory. The price of future new supplies will likely be much higher than the present spot price if proper consideration is not given to producers who have long-term supplies.

All the aforementioned regulatory changes at the Federal level have triggered similar actions by state regulatory bodies. Specifically, The California Public Utilities Commission is now conducting hearings to implement its decision on the restructuring of the California natural gas industry. The CPUC is proposing to divide the market into core and noncore segments.

The core segment would be comprised primarily of residential and small commercial users, while the noncore would be comprised of large commercial, industrial and electric generating users having the ability to switch to alternate fuels. Essentially the noncore consumers would be held responsible for acquiring their own supplies while the core consumers would be supplied by the local distribution company. Certain noncore customers could, at their option, elect to be served by the local utility. The gas supply portfolio of each category will be made up of both long term and spot supplies. This system will institutionalize the spot market but also holds the prospect of developing a more reasoned and rational approach to recognizing the value of long term gas supplies than we are now experiencing.

One of the major issues that stands in the way of a fair and national market is unfair competition through the use of tilted rate designs. El Paso and the New Mexico producers have been victimized by this practice, particularly with respect to the use of the "as billed" mechanism for pricing gas imported from Canada. The FERC is to be commended for its recent decision in a Natural Gas Pipeline of America case where it effectively held that rate designs for pricing Canadian gas by U. S. pipelines to U. S. consumers should be no different than those utilized in pricing U. S. gas to U. S. consumers. We ask that you urge the FERC to stand firm on this decision on rehearing. Further, the job is not done until the California PUC implements PG&E's purchasing practices to properly recognize the Canadian "as billed" costs in PG&E's rates and sequencing practices.

On a more positive note, there are several things which can be done to place more New Mexico produced gas in the market. I would first call to your attention the application filed with the FERC by El Paso and Transwestern Pipeline Company for approval for the Mojave pipeline project. Mojave will be a new pipeline tied to the existing El Paso and Transwestern systems in Arizona and extending into the Kern County areas of California to provide service to the rapidly developing enhanced oil recovery market. This is the largest developing natural gas market in the country and offers the prospect of 600 million cubic feet per day or more of market potential. Of the projects competing for this load, Mojave offers the best and maybe the only hope for selling more New Mexico produced gas in this promising market.

There are also opportunities for moving more gas to market through the creation of producer cooperatives.

However, congressional action providing for limited antitrust exemptions is probably required to insure that this activity can be sucessfully implemented. The co-op arrangement would be particularly beneficial to small producers who could use the cooperative to aggregate their supplies into marketable blocks.

Finally gas markets could be improved by the removal of existing marketing restraints imposed by the Fuel Use Act and incremental pricing. An outright repeal of these provisions would ensure that natural gas could compete in the market place strictly on the basis of price.

Thank you Mr. Chairman. That concludes my statement.

Senator BINGAMAN. Thank you very much.

Our next witness is Charles Johnson, who is chairman of the Board of the First National Bank of Artesia, and has been president of the bank for 35 years and been associated with banking in oil producing communities for more than 40 years.

We're glad to have you here, Charles.

STATEMENT OF CHARLES JOHNSON, CHAIRMAN OF THE BOARD, FIRST NATIONAL BANK OF ARTESIA

Mr. JOHNSON. Thank you, Mr. Chairman, Mr. Domenici, and Representative Skeen.

In the essence of time, I'm going to cut my remarks very drastically.

We have heard a world of fine information here this morning and I think that most of it can be applied to nearly every community in our state and, certainly, it applies to the other seventeen oil producing states.

I will very quickly view this in a different light. I'm going to—I must say first, though, that I'm so happy that you gentlemen and the other members of our congressional delegation are so interested and that you're going to carry this message back to your colleagues in Congress and try to see that something is done to alleviate the situation.

I look at this as an unattended, and I put my tongue in my cheek as I say unattended, or perhaps unrecognized disease. This disease has developed into a cancer that's eroding the oil industry in this and all the other oil producing states. It's eroding the economy of our nation more than people realize. Our state is hurt, our cities are hurt, and our towns are hurt.

You know, for a while, oil prices jumped a little bit; they went up from $10 or $11 a barrel to $18, and we thought perhaps we could see a light at the end of the tunnel. Then, yesterday morning, this comes out in the paper: Oil prices slide to $16 a barrel.

Of course, we're concerned where does it go from there.

Just as a simple illustration of what's happening here in our State. The officials of Navajo Refinery in our town advertised last week for six permanent jobs. The management of that organization tells me that they had over 465 applicants for those six positions. This thing is critical.

This morning we saw a parade of the most beautiful equipment I have ever seen go down the street here. That equipment is very, very valuable; but, sitting in those yards, it isn't worth 15 cents. The owners of that equipment must have some incentive to hold on. I hope and pray that, and they're praying, too, that something will come to cure this malady that we have.

Just as an example about hanging on, this is a—probably not in line, but a lady in our town a few weeks ago became ill. The doctor sent her to Albuquerque where they have the most beautiful equipment in the world to save lives, treat cancer, and so forth. The lady did not have incentive to hang on. She asked to go home to die. They permitted her to leave that hospital and she came back to our town. Within three days, she was gone. We cannot let this happen to the oil industry. We just can't do it. We've got to create an incentive, something for these people to go ahead and develop this great industry.

Now, I'm not directly involved in the oil business, but we in the banking industry are having our problems, too. We're not getting a lot of cooperation out of the Comptroller of the Currency in Washington to help us bear with these people in the industry. Where we try to be lenient and help John Doe carry on, maybe interest only on a loan until he can get some work and get back in the business, we are being told to get rid of those loans out of our banks. And, as you know, that policy has closed banks in this town, clear cross South Texas into Louisiana and Mississippi.

I don't know the answer to it, but I will say this, and close my remarks by saying, that those of us in my industry will do our best to hang on, help these people and see them through these trying times until you folks can come to our rescue.

Senator **BINGAMAN**. Thank you very much.

Our next witness is Fred Hansen, who's with Associated Natural Gas, Inc., and speaking for the crude oil refining industry. Fred is past president of Navajo Refinery and past president of Southern Union Refinery in Lovington and past president of Southern Union Co. So we're glad to have you here today, Fred.

STATEMENT OF FRED G. HANSEN, ASSOCIATED NATURAL GAS, INC.

Mr. **HANSEN**. Thank you, Mr. Chairman, Senator Domenici, Congressman Skeen.

I guess I'm here today to say to the Senate Energy Committee: Don't forget the refining industry. Congressman Skeen smiles. He heard me say that some 16 or 17 years ago when he was in the state senate and we were asking for help then, and I guess we still need that help. The best evidence is a closed refinery that we have 18 miles up the road here at Lovington.

There's a 6-percent decline in refining capacity since 1983, 3-percent decline in catcracking, and a 5-percent decline in reforming. At best we could say we're in a stagnate situation.

I do not believe there are any refineries being built, although there are some upgrades at a few major refineries. I think the reason is the costs for U.S. refiners are higher than those refineries outside our boundaries because we have an uncertain environmental situation and a high degree of risk.

We need the environmental safeguards and we need the clean-up funds, and we want to pay our employees well, and we want to have our employees rewarded and their pension plans funded, and even perhaps some allowance for inflation such as the federal employees get.

To do this, we must make provisions for the differences in the conditions we expect U.S. refineries to operate under. We need a way to, in the words I'm sure you hear described about other industries, "to level the playing field."

We need an import fee that is higher on refined products than it is on crude oil to recognize the cost differences, at least those differences due to environmental and other government mandated regulations. Now, I know that, in the sense of—or at least I expect in the sense of Senate bill 460 is probably not possible. I can see the consumer states immediately saying going higher on a product is not something we can do.

Senator **Domenici**. Mr. Chairman, might I ask: How much higher, Fred?

It isn't impossible. The bill was drawn understanding we would meet with refining people and see what was a reasonable incremental difference. So what do you say the difference ought to be?

Mr. **Hansen**. Well, Senator, I think we would have to calculate it to say just, you know, the—in effect, not an advantage, but something that makes us equal. And figures I've seen in the past was something in the 80-cent range; but those figures are a couple of years old. It's been a while since I've been real active in that.

With that, I'd just—I'd like to urge the committee to be aware of the advantages which foreign refineries have and consider ways to level the field of competition so a healthy refining segment will continue to exist with a strong preference for U.S. crude oil.

Senator **Bingaman**. Thank you very much.

Our next witness is Charlie Smith, who is chairman of the Board of Watson Truck and Supply, who is a native of New Mexico, and his firm, of course, has been serving this area for many, many years, I gather over 40 years.

We're glad to have you as a witness.

STATEMENT OF CHARLIE R. SMITH, CHAIRMAN OF THE BOARD, WATSON TRUCK AND SUPPLY

Mr. **Smith**. Thank you very much, Senator Bingaman, Senator Domenici, Congressman Skeen. I do appreciate the opportunity to be here with you this morning. I do represent a family-owned business that's been in this community for 44 years selling oil field equipment, supplies, automobiles and trucks.

I'm not here today to hold out myself to you as an authority on the oil and gas industry. I shall attempt briefly to confine my remarks to areas on where I've had some contact for the 20-something years that I've lived here. Mainly in the three areas of retailing, retail sales; banking, where I served as a director for 13 years of a failed bank in this community; and education, where I presently serve on the Hobbs Board of Education.

It has already been well covered today, the increasing dependence that we have on foreign oil. I won't reiterate that again.

I would say that our quality of life and our standard of living, though currently still recognized to be among the highest in the world, is obviously slipping. That high quality of life has been due to a combination of our production technology and the heavy use of energy and equipment by our people.

The domestic oil industry is obviously vital to national defense. That's been covered well this morning. Our President is very strong on national defense. That's nothing new. George Washington said to Congress in 1790 to be prepared for war is one of the most effective ways of preserving peace.

In view of all this testimony you've already heard and our dependency on oil and gas, to have an adequate supply we must have a good domestic oil and gas industry.

What effect has this had on retail business? Our mayor has commented very well on what that's done in this community. Eleven thousand lost jobs in Lea County no long purchase automobiles; they no longer patronize our restaurants, our clothing stores, our furniture stores, our medical communities, and yes, even our churches are suffering from that decline.

On the national scale, the loss of high-paying manufacturing jobs have been replaced by jobs in the service sector, which typically pay minimum wages or less. Oil field jobs have been good-paying jobs.

Projections for consumer purchasing increases now rest on expectations that the Tax Reform Act will encourage individuals to borrow against equities in their home in order to deduct the interest. Of course, that would merely mortgage for 15 to 20 years our purchasing power to satisfy current consumptions.

It's been well alluded to what delinquency rates on commercial paper in this area have done. They have risen dramatically. Families that are stretched as far as they could go have found their cars and other consumer purchases repossessed as overtime hours or no hours at all faded with the slowdown. Some of our customers have been honest enough to bring the keys back to us; others have left for California and Florida and Ohio to use them as long as possible before they were picked up.

The bank failures you already know about, 79 of them in '84, two more than there were in 1937. Most of these were in the Midwest and the Southwest, 120 in 1985, and this community was one of those, also, 145 in 1986. Let me just put one thing in perspective in that regard. The immediate effect on this community has been the shrinkage of the assets size of the two largest banks to a combined total that's scarcely the size of the largest formerly.

I was interested last night, as Mr. Perry spoke to the Permian Basin Petroleum Association, he indicated the same thing had happened in Midland. The assets size of those banks over there not equaling the former. That has been the net effect to take out one banking institution in this community in the range of 300 million dollars.

As capital is being lost by the oil industry through operating losses and right down to net reserve, a chain reaction has started which is causing further deterioration in the allied sectors of this economy placing further demands on state and federal assistance programs. That was adequately brought to your attention this morning.

I feel I would like to make some comment on the effect of what this has done to education, both locally and statewide. Tax assessments on oil and gas production were some $516 million in fiscal 1984 and 1985; and that provided 50 percent of the operational budgets to all the public schools in New Mexico.

I was interested in your comment, Senator Domenici, relative to the rest of the State knowing about the oil and gas industry. I believe they do understand that better, though only 8 of our 33 counties are oil and gas producing. Albuquerque public schools received $121 million of their operating budget from oil and gas.

I think we need to make the same analogy in New Mexico as we make nationwide, that these eight counties certainly have an effect on the State of New Mexico, the oil producing States in the country certainly have an effect on the Nation.

I have the general feeling if you're doing business in the Rio Grande corridor, you're doing reasonably well. I'm thrilled about that; we all are. We are obviously glad to have any good economy in this state, but I realize now that the rest of the state shares with us our concern about the oil and gas industry.

In Lea County, oil and gas pays $23.6 million of our school budgets for the five school districts in this county. Fifty percent of all that money, as I've said, is generated by direct taxes on oil and gas; about 17 percent nonresidential; 33 percent, the remaining, comes from oil and gas related services.

The real issue might be defined as a national industrial policy. Clear back in 1952 the Bailey Commission defined the issue that "a national policy should be to gain the greatest security at the lowest cost." They continued, "In a sense, policy making and administration for materials is a huge national insurance business which seeks to protect the nation against tragic contingencies such as the collapse of the living standards and defeat in war."

You know, the problems we are facing here in the energy section are among the latest evidences of casualties in a deteriorating industrial manufacturing economy.

Lee Iacocca has already been referred to once today. I'd like to again quote him to say "I have to wonder what's next for America when we are no longer an industrial power. We can't be a military power for long, not without an industrial base, and we can't be much of an economic power with our best paying jobs going offshore. Are we slated to be a service power, the double-cheeseburger-hold-the-mayo kings of the whole world. The simple fact is America isn't going to remain any kind of power unless it remains an industrial power."

I read in our local newspaper this past Wednesday the following headlines that the proposed fee on imported oil has the industry sharply divided. The article goes on to point out that the reason why, when the National Petroleum Council suggests that low oil prices are good for the economy. I understand that's a difficult question.

We in the automobile business feel we've learned a little bit about foreign competition. As Mr. Iacocca said, again, "You guys are protecting the wrong market. It's the American market that's sick." And let's look at why we have a 50-billion dollar trade imbalance with the Japanese and the imbalance is getting worse.

Japan accounts for almost 40 percent of America's trade deficit and 80 percent of Japan's total surplus comes from just one single market, the United States. Why did we allow this to happen to us? We got lazy and we got lazy in Detroit, maybe we got lazy in Washington, maybe we got lazy in Lea County. We have, however, refused to play by the rules of international trade which have been written by other countries, primarily the Japanese, in three areas. It's OK to limit access to your home markets, even to friends who have allowed the Japanese complete access to their markets. Rules that said there was nothing wrong with government and industry getting together to help the country compete. And rules based on the simple and wholly logical assumption that you always do things in your own self-interests. These are the rules of international trade today, and they're certainly the rules by which everyone else is playing by. It just so happens, once again I echo what's already been said here today, we're not operating with free trade, but we're operating with managed trade, and I realize that's a concept, also, that's very highly emotional, right up there with motherhood, apple pie and the flag.

We continue to operate from the premise that we can pay for all of our friends and the price is going up by the hour.

Where shall we draw the line on our basic industries?

Agriculture? Who cares?

Potash? We have many of our friends over here from Eddy County today. I see many similarities in their problems that I see in our problems.

Banking?

Are we going to let foreign elements control all of these basic industries?

In my opinion, we need a realistic, coherent, consistent national energy policy, and an international trade policy.

OPEC members have successfully manipulated our oil prices and supplies, our booms and our busts for more than ten years.

It's interesting to me, as we read in the paper, that OPEC doesn't have a consensus on what they should do. I think they have had, always have had, one goal in mind, and that is to see the decline of the domestic oil industry in the United States. That's where their market is. That's where the Japanese automobile market is. That is where the market for the entire world is.

If one of my customers is sick upon whom I depend for 80 percent of my sales, I have two choices: I either attempt to go out and find another customer; not being able to do that, I like to try to get the health of that customer in better shape.

Our American banks, once the leaders of the financial industry worldwide, occupy only 2 slots on the list of the 10 largest financial institutions internationally.

Management in energy sector banks now find themselves working for their chief competitors down the street, or more commonly, from a money-centered bank in a different region, and we must ask if we shall soon face management from foreign entities as we—or pick up our proportionate share of uncollectible loans to Third-World countries.

Many foreign governments have already identified the welfare of their nation with the welfare of their corporations and tried a variety of policies, including subsidies, import taxing policies and artificial manipulation of their currencies to promote the prosperity and success in the international markets of these corporations.

In summary, from a retailer's standpoint, I would like to echo my concerns and recommendations. Adam Smith, in his book "The Wealth of Nations", chapter 3, says "A nation should not tax industry for its debt. It feebles the industry of that nation."

I ask you to help us get this nation's business back to a competitive nature. Let's repeal the windfall profits tax. It wasn't a windfall profits tax anyway. It was a euphemism for confiscation.

When the Saudis were getting $35 to $40 a barrel with lifting costs of a $1.50 average and the technology and most of the equipment provided by the U.S. companies in the first place, that was a true windfall.

Let's repeal the Industrial Fuel Use Tax of 1978. Totally deregulate all natural gas by price. Restore percentage depletion to 27.5. Adopt the proposed phased-out import fee. In short, let's create some tax incentives for new production and workover wells.

In closing I would like to make one other remark. I attended the dinner last night when Senator Bingaman gave us some indication of a new BLM directive to indicate that perhaps some of the oil field equipment might be painted to reflect the color scheme, the earth tone color in which it finds itself in its environment. As I sit before you, I'm looking at what I think is one of the most beautiful things I see, the American flag. If you would like to drive south of here to Eunice, I think you'll see some equipment that has been painted the color of the American flag, decked out in some stars and stripes. That might not look very good in Prince George County, MD, or in Fairfax, VA; at a point in time it might have not even looked good against the mauve colored hills of Santa Fe, but it looks very good in Lea County.

Thank you.

Senator Bingaman. Thank you very much, Charley.

Let me call on our final witness, who is Velma Wiseman, the executive vice president of the Hobbs Chamber of Commerce, who grew up in Hobbs in the Permian Basin and has been employed in business for 30 years, many of those years in oil related businesses, and has a life-long career of being associated with the oil industry. Velma also gets great credit for organizing and doing the work to making this event possible.

STATEMENT OF VELMA J. WISEMAN, EXECUTIVE VICE PRESIDENT, HOBBS CHAMBER OF COMMERCE

Ms. Wiseman. Thank you, Senator Bingaman, and welcome. I really appreciate having the opportunity to talk to you today.

I won't dwell on the state of the economy and its effect on the oil producing States. The fact is that all regions and states that are dependent on extractive industries are presently faced with crisis.

The testimony here this morning has adequately described conditions and results of the oil glut created by international cartels. Having been associated with the oil industry from exploration to retail distribution has demonstrated to me the total lack of understanding that our nation has of this vital industry; the effects that it can have upon their lives. Failure to address this present crisis can undermine our economy and domestic and national security to a degree that few, if any, perceive.

By failing to develop an active and living national energy policy, we open the doors to international cartels, eventually reducing these United States to the level of a dependent Third-World country. I, for one, as a New Mexican and an American resent that this nation has never addressed this far-reaching issue with authority.

We all remember the long lines at the gas pumps. Now we hear that it's just great that the prices are lower. Little do our fellow Americans across the Nation realize that that's great now, but the future may bring a very different picture. If the present condition continues, that price can escalate to whatever the OPEC cartel chooses to inflict upon us. The present circumstances can result in effectively varying millions of barrels of oil under the rolling plains of New Mexico, Texas, Oklahoma, to say nothing of the Alaskan tundra, or the Gulf of Mexico and the bayous of Louisiana.

Oil is a depletable product. God did not provide seeds to sow to produce a new crop. I explained the process of oil and its production to a group of children by emptying a bottle of milk with a straw. When the bottle emptied, there was no more to distribute among them. The concept is the same. God provided us with little lakes of black gold under the plains of this western part of the United States. He did not provide for a way to replenish them. We have not husbanded them well, but the future of this nation will depend upon our ability and willingness to do so now.

The crisis that we presently face will ultimately affect the entire Nation. All our transportation systems are powered by this energy source. Heat and light, our private transportation, and power for industrial purposes are all dependent upon this same source. When we allow foreign nations to band together and dictate how we will live in the future, allow them to control the very core of our Nation, its ability to move, produce, and remember our food source is produced by this power also, we are relinquishing our sovereign rights as Americans to control our destiny.

As the executive director of the Hobbs Chamber of Commerce, I have witnessed the devastation that has been wrought on a business community when foreign powers are in control of the product market. Ultimately I envision the possible destruction of the free enterprise system, the concept upon which this nation is built, by a degree of apathy that is the most alarming condition that I can perceive. This condition in my vision would not be isolated to oil producing areas or states. It gets pretty cold in the Northeast, and I suspect they would be; and it gets very hot in the South, and I suspect they would be. Our climate is not that severe. Five dollars a gallon for gas could very well be the going price before it's all said and done. This sounds extreme, but the bottle can be emptied, and given present conditions, probably will be.

In closing, I ask for your support of policies that will protect our nation and our industry, which is part of that core, and I place in your hands the future of a nation as it's been placed by the electorate.

Senator BINGAMAN. Thank you very much for that excellent testimony. Let me just ask one question of one of the panelists, then defer to my colleagues here, and then we'll complete the hearing. I'd just like to ask Fred Hansen that—yours is the only testimony we have today about the problems of losing refining capacity in this country. I gather that just as more and more of the capability to produce has shifted to foreign sources, and the production that we depend upon is coming more and more from foreign sources, there's been a substantial decline in our ability to refine and to produce the petroleum products that come from oil. Could you elaborate on that to some extent? To what extent has there been a shutdown in refineries and refining capacity in this country as a result of the events we've been describing here?

Mr. **Hansen**. Yes, sir. The—I think the main factor or the main effect here is the uncertainty in the refining business has, of course, closed the marginal refineries, those that were the so-called topping units that we saw spring up in the late 1970's. Those have been closed, probably should be closed in the current situation; but we aren't seeing the new investments in the refineries that are needed to make the gasoline. Now, when prices went up, we saw a corresponding decline in the use of gasoline and other fuels in this country. That's turned around and so we're seeing our energy appetite increased, and to meet that appetite, we are going to have to build more refineries. And, as our old refineries deteriorate or wear out, then we're going to have to put in new equipment. And to do that, I think we need this so-called level playing field with foreign refineries. Without it, I think you'll see that because of their lower costs that refining will be done offshore and we will have products imported rather than crude oil.

Senator **Bingaman**. Thank you very much. Senator Domenici, go ahead.

Senator **Domenici**. Let Joe go ahead.

Senator **Bingaman**. Congressman Skeen, you have questions, please.

Mr. **Skeen**. I have just one thought and I think that Charley Johnson brought it up, and it concerns me because he mentioned the Comptroller of Currency and the problems that we've had with their appraisals of whether a bank is sound or not sound, and their policies, not only in the energy field, particularly oil and gas, but also in agricultural. And we have tried repeatedly to convince those folks that maybe they don't know as much about the business as they should and that there has seemingly been an attitude that they want to protect the Comptroller and their group of people for more than they want to protect an industry or allow its operation by their judgments on collateralization, et cetera. Am I mistaken in that, Charley? And I'm not trying to get you out on a limb with the Comptroller or anything of that kind, but—not that I could put you there if I wanted to.

Mr. **Johnson**. Well, Joe, I've been on that limb so damn long now that it doesn't really matter anymore. But we don't get the cooperation from our Washington office or the regional offices either. It's really a pathetic situation when you try to help people and they come out and tell you point blank that if you do that your loans will become substandard and must be removed from your books.

I went through the Depression in the early 1930's in the banking business when 14,000 of them in the Nation closed. There was a panic. As a result of the closing of those banks, many had to be reorganized or went completely out of business, but those that were reorganized came back and collected most of those panic designated assets. I think we're in that situation now. And I think if the powers that be in Washington would be more lenient with the financial institutions, including the one they closed in this town, I think if they had of walked in and said "Now, we'll work with you to see that those things worked out and not take your equipment and sell it at fire-sale prices," I think they could have maybe salvaged that institution. We're not getting much help.

Mr. **Skeen**. My observations have been that in many cases they have forced liquidation when it was entirely unnecessary and not relying on——

Mr. **Johnson**. Absolutely.

Mr. **Skeen** [continuing]. Local loan institutions. And I think that that's reprehensible and I think that it should require some of our attention as far as congressional activity, and I know that this is an area that Congress rarely gets into because they are almost autonomous; but I think that this has been a terrible situation. If we had a panic created, it was created by the Comptroller of Currency.

Mr. **Johnson**. That's right.

Mr. **Skeen**. Thank you.

Senator **Bingaman**. Senator Domenici.

Senator **Domenici**. Charley, on that score, there's about five or six people in the Senate headed by Senator Boren of Oklahoma, who are putting together a proposal, we'll send it to you for your ideas with reference to the issues you raise. In particular, the impact on a local community when a major lending institution is bankrupt, is there some way rather than letting all of those loans and those assets that guaranteed them go right on the market as part of the liquidation? Is there some way to ease that out by way of a slower process, taking it over in another way and liquidating it slowly? And I'd like your views on it. I think it makes some sense.

Mr. **Johnson**. Senator, it would be awfully hard to digest that in just a few words——

Senator **Domenici**. Well, I'll send it to you.

Mr. **Johnson** [continuing]. But I think that your present comptroller is a man of feeling. He's a Texan, he was raised right here in Hobbs. And I think that he has some very fine thoughts on how to salvage those institutions across the country which are in trouble. And I hope that something will come from his efforts there. I understand that maybe you gentlemen meet with him from time to time. We do need leniency, we need some understanding, we need some cooperation from those offices with the local authorities, the local bankers who know more about their economy, their people, how they can work out their situation more than those examiners do that come into the institutions.

Senator **Domenici**. I'm agreeing. I'm totally in agreement. I was just saying there is a secondary set of proposals, postbankruptcy, on easing the depression on the market surrounding the area when you turn everything loose in that bankruptcy involving state and local participation in making that process slower. And I'll send you that and see if you have any thoughts about it. To me, it seems like an excellent idea.

Before we leave the natural gas issue, if you'd permit me, Mr. Chairman, I did not talk for a moment when we had Fred here—I think Fred is still here, is he not? Frankly, our chairman has scheduled an awful lot of testimony in the Four Corner's area on the natural gas issue, and some of you will be up there or some of your representatives; obviously, we couldn't do it all in one place, so we touched on it. But I hope everyone knows that the natural gas situation is in terrible shape, also. You know it wasn't too long ago when we urged everyone to have a long-term contract, right? On both ends. Those who were buying it to deliver it, we wanted long-term; that turned into take or pay. And when you had a great reserve such as that you were really flying high. And on the other end in California, we were delighted—they were delighted to sign long-term contracts to buy your gas, right?

Mr. HARBOR. That's correct, sir.

Senator DOMENICI. Now, what we've got is California telling its own—through its utilities saying no long-term commitments to buy the gas. On the other end, they start with short-term because they want the price fluctuations to immediately flow right into their users. That goes right back up the pipeline, and now this Nation has, not 10—not 5, not 10, growing at about a billion dollars every 3 months. We think we have $13 billion worth of backed-up take or pay in the pipelines of this country on natural gas. Contract from producer to pipeline, you take it or you pay for it; that's what it means. And they ain't taking it and they ain't paying for it. And some are saying we can't, we'll go broke, and it's now up to the FEC to see how they fix it. Enormous problem. Who would have thought 5, 6, 7 years ago that long-term contracts are not good in the field of natural gas for America's future.

Our best shot to this point is to tell FERC to try to solve it. Because if we get it into the legislature of the United States, we have no idea how it's going to come out. Abrogation of contracts, first thing that comes up. Congress could say we wipe them out and let everybody start over anew. So there's enormous problems in that area.

Canada, we have one thing decent going for us; not great, but that new Chairman of the Commission is indeed giving them a little static about how they're pricing their natural gas based upon costs. We're very proud to have pushed that on her. As part of her confirmation, we asked her if she would do that if confirmed, and she has taken them on with a vengeance. We think she has control of the Commission and they will keep Canada's feet to the fire——

Mr. HARBOR. And we thank you for that, Senator.

Senator DOMENICI. Don't you think that's a reasonably good approach? I don't think it's going to solve the whole problem, but is it reasonably good, Robert, that they continue to do that?

Mr. HARBOR. Senator, I have to agree with you on that.

On your earlier statement about the contractual relationship between the pipeline and the consumer, let me give you an example. El Paso has a contract under which it has operated for many years with Pacific Gas and Electric Co. calling for 1,140 MCF per day. One day within the last 4 weeks, we delivered 100 MCF per day. We're trying to improve upon that. But that goes to show you the extent of the erosion in the contractual relationship between the pipeline and the distribution consumer.

Senator DOMENICI. I just want to make a last comment on natural gas and we'll go into it more Monday, but there were a lot of our people helped us try to develop a concept of contract carriage. I don't think that's—for many of you, it's technical; for many of you, you understand. Many people, as independents, wanted to deliver their natural gas in a pipeline that had capacity and not be subject to the pipelines themselves. From that came the concept of independent contract carriage. Make it deal with El Paso if they have overage, deliver your gas in their pipeline and you find a buyer over on the other end. We talked about it for 3 or 4 years. I think it's fair to say it isn't working. I think it's fair to say that everybody has been mistaken about it. The independents don't seem to be able to put it together in cooperatives and the pipelines are trying to do something with it, and that doesn't seem to be working. So I think we are back at ground zero on how effective that's been. Maybe that's a little harsh of a statement, but it seems to me——

Mr. Chairman, there are many problems remaining, however, I believe that, even in the natural gas field, the essence of the problem is that the price of crude oil in the United States has dropped so far down that we would have never thought it would drop far enough to have an impact on natural gas, but it has. When we found Californians beginning to decide that they would stop using natural gas and literally convert a product of crude oil, because it got so cheap, convert it into a fuel oil and deliver it to the furnaces in California for utility, all in the last 18 months, I think if we would have guessed 10 years ago for that to ever happen, I don't think one in a million would have said it could; but it has.

I thank you very much for having the hearing and to all of those that put it together. It's been a pleasure to be here.

Senator BINGAMAN. Once again let me indicate, that we have testimony that will be included in the record from Steve Pearce and Thelma Webber and Louis Whitlock. We'll also leave the record of this hearing open for 30 days for additional testimony if there are those who would like to testify and have not had a chance. I want to again indicate that I think the testimony we have received has been very valuable. It makes a very clear message about the seriousness of the problems, the effect that not only those problems have on this community and this region, but on the entire country, and the fact that those problems require immediate attention. I want to thank Senator Domenici and Congressman Skeen very much for participating in this. I want to thank those who testified and those who organized the hearing, and I want to thank all of you for attending.

At this point, we'll declare this hearing adjourned.

Thank you.

[Whereupon, at 12:40 p.m. the hearing adjourned, subject to the call of the Chair.]

[The material referred to above follows:]

February 27, 1987

I am Stevan Pearce - Hobbs, New Mexico. I work for an independent oil well service company.

I use as a basis for my comments the premise that we, in the United States, built our capitalist society on free enterprise and that an overwhelming majority of the voters prefer to maintain the free enterprise system.

I wish to address two points:

The first point is insidious because it occurs behind closed bank doors and no one can speak with certainty about the extent of the problems. Businesses today are playing by two sets of rules. There are those who service their debt and those who don't. They both are allowed to operate on an equal basis. Those who do not pay principle and interest costs, of course, can operate more cheaply. They cut prices and the businesses who do pay their bills are forced to follow suit or lose their market. Strong, well managed companies therefore are dragged into mediocrity and red ink, not by competition, but by this ~~system of~~ injustice implemented by our banking system.

The U. S. Congress should exert pressure on the banking system and reestablish the guidelines so that all companies are held accountable for their mistakes and forced to pay their bills or remove themselves from the competitive business arena to prevent them from undercuting the pricing structure of those still attempting to maintain the integrity of the free enterprise system.

Let me reiterate that I favor free enterprise and the ability of legitimate business to provide goods or service more cheaply. But that is not the issue here. The issue is companies who are allowed to continue operating without paying principle or interest on loans for two, three or four years.

The second point closely parallels the first.

Before the Congress passes laws they commission blue ribbon panels; but regardless of what the government's economic consultants say, regardless of how fine the concept sounds on paper as law; regardless of what high priced lobbyists tell members of Congress; there is one law passed by Congress that sticks in the craw of every legitimate business person. This law, which Congress refuses to repeal, continues to provide the most vicious attack on legitimate free enterprise that has ever been mounted by our own countrymen. This law rewards poor management and punishes good management. I, of course, am speaking of the current bankruptcy laws.

I am telling you, when Braniff Airlines defaults on a $740 million dollar debt and can go to the table, get some fancy rescheduling and come back to drive prices down, something is wrong.

All of American industry is faced with the same problem and the oil industry is no different. The Chapter 11 Bankruptcy is a safe haven for poor managers and dishonest businessmen alike. Each day, legitimate operators are forced by the courts to sit in silence while the abusers are given free license to drive prices and industry standards downward. It is a disgrace to the free enterprise system this atrocity is allowed to exist. The bankruptcy law is the most ill-conceived, damaging, LEGAL component to business today.

Feb 28 1981

A FIVE-POINT PROPOSAL

1. An import tax on foreign production based on a sliding scale to protect the cost of producing and exploring for domestic reserves.

2. Repeal of the Windfall Profits Tax.

3. Restoration of percentage depletion to former levels of 27.5 percent.

4. Repeal of the Industrial Fuel Use Act of 1978.

5. Total repeal of all price controls on natural gas.

Thelma Linam Webber

Thelma Linam Webber

THE NATIONAL ASSOCIATION OF ROYALTY OWNERS, INC.

NEWS RELEASE

Contact: Jim Stafford
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PRICE DROP ZAPS FARM-RANCH ECONOMY WITH BILLIONS IN ROYALTY DRAIN

HOUSTON, Tx (Feb. 26) -- Impact of the recent slide in crude-oil prices on the nation's mineral owners was probed today by an official of the Ada, Okla., based National Association of Royalty Owners, Inc.

Thomas W. Allen of Houston, national chairman of NARO, said the most recent $10 drop in oil prices will cost the nation's 2.5 million royalty owners an estimated $6 billion in lost royalty income, should current price trends prevail. He said one-third of the drop is a direct hit on farm-ranch economies, now in their worst shape since "the Great Depression," with another third of the decline accounting for a severe drain on rural areas of the nation.

"Apply these figures to the economic multiplier of three and you see a potential total loss this year of $18 billion, with $12 billion coming from rural areas and half of that figure, or $6 billion, coming from the agricultural sector," said Allen, an investment consultant and certified financial planner.

NARO statistics cited by Allen show Texas could sustain a $1.3 billion loss in royalty income over the next twelve months should the price decline continue.

They lead the pack as the potential big loser of the top ten producers of the lower 48 states, followed by Louisiana with a possible $740 million royalty loss, California with a $720 million cut, Oklahoma with a $270 million decline, Wyoming with a $146 million drop, New Mexico with a slice of $116 million, Kansas down by $112 million, North Dakota suffering a loss of $77 million and Mississippi facing a $49 million decline.

(more)

Other producing states which could see a considerable erosion of royalty income include Montana, with $45 million lost; Colorado with $43 million down; Illinois with a slide of $43 million; Michigan down by $48 million; Arkansas off by $28.3 million; Utah skidding off $45 million; Alabama minus $28 million; Ohio less $22 million; Florida off by $16 million; Kentucky down by $11 million, Pennsylvania off by $6.2 million and Indiana minus $6.9 million.

The figures, prepared for distribution today to governors and Congressmen of 24 producing states, were released by NARO in a campaign to combat loss of percentage depletion -- a move now under debate in Congress -- and to push for an import tax on foreign crude, a move Allen believes will prop up crude prices and present furher erosion in domestic exploration and production.

Allen said that the states of Texas, Oklahoma, Arkansas, Louisiana, Kansas, New Mexico, Montana, Colorado, North Dakota, South Dakota and Wyoming "likely will have the highest portion of royalty-subsidized farm-ranch operations."

"It is time the nation's political leaders quit penalizing our energy industry and shift the burden of taxation to imports, who have been beneficiaries of a free ride amounting to a massive subsidy from our own government," Allen said today. "NARO recommends that any taxes from such imports should specifically provide for preservation of percentage depletion for royalty owners and independent producers, plus act as the mechanism to end the windfall profits tax, which placed royalty owners in the highest taxed category in our nation's history."

Allen said NARO members in 50 states were continuing a campaign begun earlier to replace percentage depletion with capital gains status for oil and gas royalty income, should Congress attack the tax offset further, a move he states "puts us on equal footing with other investors with the appreciably better financial advantage enjoyed by surface owners."

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THE NATIONAL ASSOCIATION OF ROYALTY OWNERS, INC.

NEWS RELEASE

Contact: Jim Stafford
Jefferson Hotel
Washington, D.C.
(202) 347-2200

WASHINGTON, D.C. (Sept. 10) -- Congressmen and ranking Administration officials were told today that the Reagan Administration's willingness to accept oil and gas policy revisions without a sliding-scale import tax could self-destruct.

Jim Stafford of Ada, Oklahoma, executive director of the National Association of Royalty Owners, said the nation would remain a sitting duck for a war of shortage, and artificially contrived oil prices at sky-high levels, unless it took a clear look at "not only the national security implications of OPEC manipulations but also at the consumer whiplash that is absolutely certain to result."

"That would mean facing up to the fact that the domestic petroleum industry is getting sicker by the minute, and fulfillment of ancient campaign promises may not be enough to salvage this terminally ill sector," Stafford said, referring to the April 22 policy statement by the White House to oil-state elected leaders.

He said 2.5 million owners of producing mineral interests, the royalty owners, would suffer a $6 billion loss this year should current crude oil prices continue. Of this loss, Stafford estimated one-third would be a "direct hit" on farm ranch economies of 28 producing states, "now hard pressed to stay in operation."

He said the bulk of the nation's royalty owners had fragmented interests, with the average monthly check "between $200 and $345," which in "most cases go to people 65 years and older." The energy issue is not one of convenience but of survival to many of these people, he added, stating that they have long advocated an import tax as "best for all sectors of the nation in the long-haul."

(more)

NATIONAL FIELD SERVICES OFFICE · P. O. Box C · 119 North Broadway · Ada, Oklahoma 74820 · 405 436-0034

Stafford said the independent producer section of the economy was failing at a much faster rate than statistics might show. "These people, who account for over 80 percent of drilling and exploration, have always been thinly capitalized, and most have been way over their head since 1983," he said, calling the independent producer the "mom and pop" end of the energy business.

He called "dangerous without parallel" recent Department of Energy statistics showing an increase in Saudi imports of 600 percent in the twelve months ending in last January.

"The major oil companies have not, with rare exception, backed an import fee. This is not out of concern for the Northeastern part of the United States, as may be reflected in statements, but out of bottom line concern for the long-term, which heavily includes their low-cost imports," he said. "In one sense of the word, they are part of the OPEC cartel, and their input should be discounted when talking about national security as it relates to domestic energy production."

Stafford said potential energy measures recently approved by the White House are three years overdue and badly needed but too late to prevent wholesale bankruptcies throughout the oil producing states. "Six out of seven of the pro-industry measures now agreed to by the White House will not be effective until April 15, 1987, when much of the independent drilling sector and royalty-assisted farms and ranches will be dead and buried," he said.

"This is not just Oklahoma and Texas, as is conveniently stereotyped, but all states depending heavily on marginal stripper production, such as Illinois, Kansas, California, Pennsylvania, Kentucky, West Virginia and Ohio," he said.

Stafford, whose organization has 39,000 members in 50 states, said if conditions continue, nearly 200,000 stripper wells across the nation will be shut-in, with 600,000 bbls. per day of production "lost forever." He said these wells, once abandoned, are subject to water migration, "making them technically, if not financially, gone forever."

"The nation is fooling itself with elation over cheap imported oil and the hangover from this binge may be irrepairable harm to our economy and our national security, which is directly linked to domestic producing capability," he concluded.

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FACT SHEET
CRUDE OIL PRICE DROP IMPACT ON ROYALTY OWNERS

Average crude oil prices, at $16 per bbl. for 1986, caused royalty owners of 24 major producing states to suffer $3.9 billion in losses from a $26 per bbl. base average for the prior year. Some estimates indicate a loss of approximately $6 billion for total U.S. production.

This does not allow for loss of bonus (option to drill) income, (which in 1985 in Western Oklahoma was over $100 million), nor the shutting-in of many of the nation's stripper wells.

One-third of this is a direct hit on farm ranch operations, while another third is a loss of income to rural communities.

Apply these figures to a multiplier of three, and there is a loss in producing states this past year of $11.7 billion from royalty income alone, with a total U.S. loss of $18 billion.

Texas' over 700,000 royalty owners were hardest hit, with a loss of $1.3 billion, followed by Louisiana, with a $740 million loss, and California with a $720 million cut. Oklahoma down by a $270 million decline among its over 200,000 royalty owners, Kansas' 180,000 royalty owners suffered a $112 million cut and North Dakota a $77.3 million loss.

Industry estimates and NARO research indicate 2.5 million royalty owners in the nation.

(attached are figures for each state on the above loss)

THE NATIONAL ASSOCIATION OF ROYALTY OWNERS, INC.
Field Services Office: 110 N. Broadway, P.O. Box C, Ada, OK 74820 Phone (405) [illegible]

CRUDE PRICE DROP IMPACT ON ROYALTY INCOME IN 1986

Alabama	-$ 28.2 million
Arkansas	-$ 28.3 million
California	-$720.0 million
Colorado	-$ 43.0 million
Florida	-$ 15.6 million
Illinois	-$ 43.7 million
Indiana	-$ 6.9 million
Kansas	-$112.0 million
Kentucky	-$ 11.0 million
Louisiana	-$740.0 million
Michigan	-$ 48.1 million
Mississippi	-$ 49.0 million
Montana	-$ 45.0 million
New Mexico	-$116.4 million
New York	-$ 1.5 million
North Dakota	-$ 77.3 million
Ohio	-$ 22.3 million
Oklahoma	-$270.0 million
Pennsylvania	-$ 6.2 million
South Dakota	-$ 1.4 million
Tennessee	-$ 1.3 million
Texas	-$ 1.3 billion
Utah	-$ 45.0 million
Wyoming	-$146.0 million

Footnote: The above data was compiled from 1984 production records of World Oil on a per barrel basis. The royalty computation was set at 15 percent as a weighted average of common royalties of 1/8th, 1/16th, and 3/16ths. The base computed was from $26 per bbl oil to a 1986 average of $16. Farm-ranch operations -- on an average -- account for a minimum of 1/3rd royalty recipients, rural areas another 1/3rd with the remainder, due to assignments and migration, urban or retirement area dwellers. For economic impact determination in rural areas, the multiplier of 3 is often used. NARO surveys show the average royalty owner of oil or gas at or in retirement (over 65) and surviving on run checks of $200 or less except in select parts of the nation (W. Texas) where an average $345 is the norm. There are an estimated minimum of 2.5 million royalty owners of oil and gas interests in the nation.

THE NATIONAL ASSOCIATION OF ROYALTY OWNERS, INC.
Field Services Office: 119 N. Broadway, P.O. Box C, Ada, OK [illegible] Phone [illegible]

2/16/87

NARO HOTLINE

A Legislative alert for selected members of the National Association of Royalty Owners, Inc.

TO ALL NEW MEXICO NARO MEMBERS:

AS YOU MAY HAVE LEARNED FROM YOUR LOCAL NEWS MEDIA, THE HOBBS CHAMBER OF COMMERCE IS SPONSORING A UNITED STATES SENATE ENERGY COMMITTEE FIELD HEARING ON SATURDAY, FEBRUARY 28.

WE URGE YOU TO ATTEND THIS VITALLY IMPORTANT HEARING TO LET WASHINGTON KNOW THAT THE CURRENT CRISIS WITHIN THE ENERGY SECTOR CANNOT CONTINUE WITHOUT IRREPARABLE DAMAGE NOT ONLY TO THE INDUSTRY AND THE ECONOMIES OF THE PRODUCING STATES, BUT ALSO TO THE SECURITY OF OUR NATION.

I AM ENCLOSING FOR YOUR USE, SHOULD YOU ATTEND, A NARO NAME TAG -- WEAR IT TO LET THEM KNOW THAT IT'S NOT JUST THE PRODUCERS WHO ARE BEING HURT -- AND ALSO SOME FACT SHEETS WHICH DETAIL THE ECONOMIC IMPACT OF THE DROP IN CRUDE OIL PRICES ON THE FARMING AND RANCHING COMMUNITIES OF THE PRODUCING STATES.

THE HEARING WILL BE HELD IN THE PASKER ARENA AT THE HOBBS HIGH SCHOOL FROM 9 A.M. TILL 12 NOON ON SATURDAY. PRESENT TO HEAR TESTIMONY WILL BE NEW MEXICO SENATORS JEFF BINGHAMAN AND PETE DOMENICI AND NEW MEXICO REPRESENTATIVE JOE SKEEN, ALONG WITH OTHER INVITED MEMBERS OF THE U.S. HOUSE AND SENATE.

A LARGE ATTENDANCE WILL PROVE THAT THE PEOPLE OF NEW MEXICO ARE DEMANDING A SANE NATIONAL ENERGY POLICY TO KEEP AMERICA ENERGY INDEPENDENT.
BE THERE! AND LET YOUR VOICE BE HEARD!

NARO • P O Box C • Ada, OK 74820

DOMESTIC PETROLEUM INDUSTRY OUTLOOK

MONDAY, MARCH 2, 1987

U.S. Senate,
Committee on Energy and Natural Resources,
Farmington, NM.

The committee met, pursuant to notice, at 9 a.m., in the San Juan College Theater, Farmington, NM, Hon. Jeff Bingaman, presiding.

OPENING STATEMENT OF HON. JEFF BINGAMAN, A U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator Bingaman. Why don't we go ahead and start this hearing. I want to welcome all of you to this hearing of the Senate Energy and Natural Resources Committee. I think there are several purposes in the hearing today. Obviously we need to call attention to the serious difficulties being faced by the oil and gas industry here in the San Juan Basin and hopefully take some information and message back to Washington, and to the other members of the Senate about the seriousness of this issue. I want to start by just referring to some statistics that are reflected in the charts here in the front of the room. Since early October of 1985 the operating rigs in the United States have gone down about 49 percent. Drilling permits are down about 50 percent while imports from OPEC nations are up 166 percent. Under various scenarios we could expect imports to exceed nearly 50 percent of our consumption in the United States by 1995. In New Mexico, revenues generated by the industry showed a 25-percent drop in 1986. The total level of industry employment in the State has dropped from 13,200 in 1985 to about 9,000 in October of 1986. The number of drilling rigs are shown to average about 29 today, as compared to an average of 71 in 1985. Of the bankruptcies in this State, there were estimated 2,500 in 1986, and a fourth of those occurred in the counties which produced most of this State's oil and gas. I'm sure these statistics don't begin to address the impact of the decline in the infrastructure that supports the industry, the impact on local communities and businesses that depend in this State on the continued viability of the oil and gas industry.

Whether you've come from Farmington, Bloomfield, Aztec, Colorado or the Navajo Nation, I think it's clear that there's a consensus from those I've spoken to that some action must be taken and must be taken quickly to deal with the problem of cheap imports into the country, and to stabilize the price of oil and gas. This is not just a regional issue. What we need, obviously, is an energy policy that's good for the entire country, not just for New Mexico.

I think we need to make the case in Congress that this is not strictly a problem for the oil patch. We need to have an industry that is in the long-term best interest of the entire country. Also, this is not a partisan issue. I think Democrats and Republicans alike have a sincere interest in finding solutions to the serious problems that the industry faces. Finally, this is a personal issue that concerns all of us, and obviously, your presence here today demonstrates the strong concern that exists in this community.

Before we go forward, I'd like to just thank a few of the people who took a lead role in organizing this hearing and helping with the preparations for it. Don Schreiber has done a great deal of work, and I appreciate that very much. The Farmington Chamber of Commerce has worked hard also. We appreciate the efforts of San Juan College and president Jim Henderson for the hospitality and help that they've provided. Donna Ogilvie is the public information officer at San Juan College and has worked diligently on this hearing. Eve Thompson, executive director of the Farmington Chamber of Commerce; Betty Cleveland, president-elect of the Farmington Chamber of Commerce; Russell Buss, chairman of the Oil and Gas Committee of the Farmington Chamber of Commerce; Tom Dugan, oil and gas producer; George Coleman; Greg Marion and Red Walsh and Jack Cole have all worked to help make this event a success.

This hearing is conducted under the auspices of the Senate Energy and Natural Resources Committee; and as you probably are aware, we held a similar hearing on Saturday in Hobbs so that the citizens of that part of this state could express their views to the Senate on the current status of the industry and what's needed in order to revive it. I'm pleased to preside at the hearing on behalf of the chairman, Senator Bennett Johnston from Louisiana. He was unable to be here today.

We have 13 distinguished witnesses who are clearly very qualified to speak on the issues before us. I want to, of course, start by welcoming my colleague, Senator Domenici, who has truly been a friend of the oil and gas industry and who has made very important contributions in the Congress in seeking solutions to this problem and the many problems facing our nation. Senator Domenici, why don't you go forward with any initial statements you'd like to make.

STATEMENT OF HON. PETE V. DOMENICI, A U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator DOMENICI. First of all, Mr. Chairman, I want to thank you for having these hearings, the one in Hobbs and the one here and say to all my friends out there in the audience, and those who are listening, this is the third hearing that I've been to in an effort to work up some momentum and see if we can't move that momentum out of the oil patch into Washington, D.C., and back to northeastern America.

As Jeff alluded, the chairman of the full committee is a man named Bennett Johnston. He comes from Louisiana. He invited me about two and a half weeks ago to go to his state with him. He had

8,500 constituents at a meeting wherein they discussed the plight of the oil industry and gas industry in their state.

Clearly we have had a significant event in Hobbs, NM, where the people came to let us look at their faces and have spokesmen tell us about their problems. Today we're going to do the same thing. This is one of the most difficult issues confronting our country. Our country doesn't like to plan. Our country likes to take it a day at a time.

About 3 months ago, as we wound up the session, we ordered the president in the last bill we sent to him to conduct a national security evaluation. It's due shortly. We asked him to evaluate America's future if we continue to become more and more and more dependent on foreign oil We look forward to that report within the next 25 to 30 days. Hopefully it will tell him and tell the American people that we're in big trouble.

Hopefully it will tell some of those in northeastern America who think it's marvelous to have the cheapest possible gasoline prices that this is just a temporary kind of thing and that sooner or later this great nation is in big trouble. I don't think anybody thinks there are easy answers.

The problems up here are slightly different than down in Hobbs, and New Mexico's oil and gas problems are slightly different than Louisiana's. But basically the whole thing centers around the fact that there is no free world market; there is a cartel. If they ever get their act together—and we pray they won't—we will absolutely be at their mercy; no question about it. They gave us gas lines once in some parts of America. They are giving us soup lines. And if they get control of the situation, they'll soon have our destiny in their hands. I don't think there is any doubt about it.

I believe they are smart enough—they are smart enough to keep the price at about a level where it will do three things: one, increase their share of the world market—they are doing that. That's known—second, cause what is exactly happening right now, America's energy businesses, gas and oil business, to dwindle and shrivel so that it is incapable of coping with our needs. That causes unemployment and all the other things that go with it. And, third, I think they are smart enough to keep the price at a range where alternatives won't come on, either, so that as we grow in dependence we will also have less and less opportunity when the time comes to do it ourselves.

I think that's absolute disaster for the future for our people, our children, our national security, and the basic American industry which feeds itself, basically, whether we like it or not, on energy.

So I hope today you will confirm this by your presence and by your statements and that Senator Bingaman and I can perhaps get a few more converts. The bill that would put an import fee on, the bill that I introduced, that Jeff joined—and it has about 11 people on it—Senate bill 460, now has Senator Benson on it, has some nonoil-producing-state senators.

We hope that will grow in numbers and the message will grow as a result of these kinds of hearings and I—because I may forget—want to once again thank Senator Bingaman for conducting the hearings on behalf of the committee and thank each one of you for taking time out to be here with us. Thank you, Jeff.

Senator **Bingaman**. Why don't we go ahead with our witnesses. Thank you very much, Pete, for your statement. We have 13 people scheduled as witnesses. I would urge that each of you try to summarize their testimony in 5 to 10 minutes, if at all possible, so that we do have some time for questions. And I'd also point out that there are several who may want to submit testimony or statements to be included in this record that we print and report back to the committee. We will leave the record open for 30 days for any such statements that any of you would like to present. Carol Cloer has asked that the statement that she has be included in the proceedings; and we're glad to do that, Carol. If any of the rest of you would like to, we're glad to include yours as well. If we do finish before 12, it's my hope that we could take any additional statements that any of you have from the audience. We're not trying to exclude anybody; we are trying to get as much and as valuable of testimony as we can in the time we've allotted for the hearing.

[The prepared statement of Ms. Cloer follows:]

ADDITIONAL WRITTEN TESTIMONY
FROM THE PUBLIC

CONGRESSIONAL OVERSIGHT HEARINGS

March 2, 1987

Submitted by Carol W. Cloer
P. O. Box 250
Bloomfield, New Mexico 87413

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632-2393 - H

PROBLEM: The Gas and Oil Industry has suffered heavy profit loss in the past few years due to a decline in the market.

Projection: The future does not look good in the short range.

Industrial Reaction: Drastic cuts have been made in man power, preventive maintenance, and safety.

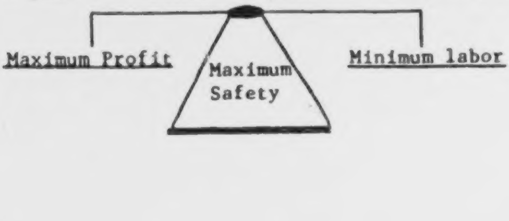
Result: The cuts have caused increased levels of production to be placed on the remaining staff. Short cuts on safety are being taken by contractors, and production field operators to try and meet increased responsibilities with less funds.

Preventive maintenance programs have deteriorated and safety staffs have been cut.

Life threatening accidents are eminent and many have occurred in the San Juan basin because of the above outlined conditions. These injuries and deaths will increase as the conditions continue to be in force.

The workers have no voice in this industry to protect their welfare.

Solution:
1. Short range: Demand compliance and provide financial incentives to the gas and oil industry to upgrade safety and preventive maintenance.
2. Long range: Assist the industry to be able to compete with foreign interests by the following steps:
   a. Tax incentives that will allow the industry to become competive.
   b. Protection tariffs on competing nations who impose them on us.
3. Perhaps a fact finding committee composed of many objective view points, i.e., the industry itself, laborers doing the dangerous work, tax experts, and market analysts could develop a plan to address an optimum balance that would include



Senator BINGAMAN. So our first witness is Bob Karlin, who's the chairman of the San Juan County Commission, former chairman of the San Juan County Commission, as well as former superintendent of Central Consolidated Schools in Kirtland, and former president of the State Activities Committee. Bob, why don't you go ahead and give us your testimony, and we may have a question or two for you.

STATEMENT OF R.E. KARLIN, CHAIRMAN, SAN JUAN COUNTY COMMISSION

Mr. KARLIN. Thank you, Senator, for the opportunity to appear before this group, I appreciate the fact that I have the first opportunity to speak. It eliminates any responsibility on my part for being redundant at some point in this testimony. As chairman of the San Juan County Commission I'd like to state, first, that irregardless of the problems that we face in San Juan County in the oil and gas industry, San Juan County is still the best county in New Mexico in which to reside and in which to attempt to resolve some of the problems that confront all of us.

As you well know, the ability of county government to provide service to its residents is directly related to property values and the economic activities within the county. San Juan County has experienced a loss of $75 million in appraised values during the 1985–86 fiscal year, reduced oil and gas activity account for most of these losses.

To offset these losses county government has been required to increase its tax levies, particularly in the area of general obligations bonds that are owed by the county itself, by school districts within the county and by San Juan College. Certain action or inaction by the Federal Government or its agencies has also added considerable burdens to the financial problems of San Juan County. The loss of revenue sharing funds has had very direct impact on county government.

It has reduced some of the services that county government has provided its facilities. In the case of San Juan County it has virtually eliminated capital improvement projects that we had in prior years been able to perform with revenue sharing funds. We're also burdened with the fact that the Bureau of Land Management has altered its regulations, its requirements pertaining to leasing of BLM land or purchase of BLM land, particularly in the area of needs to meet sanitary landfills.

The environmental protection agencies have made their regulations much more strict than they have been in past years. You may well know, or you may not know, that EPA has targeted New Mexico, and particularly San Juan County, concerning sanitary landfills and materials that had supposedly been disposed of in old and new landfills. And these new pressures, of course, bring new costs, new responsibilities to San Juan County government.

Another area of concern that San Juan County has is new Federal regulations brought on by the present administration that requires up-front funding from local or state agencies on Federal water projects. San Juan County is looking at the cost of up-front sharing for Animas/LaPlata. We have devised other means by which we think we can meet these financial responsibilities. But these changes in Federal regulations and agencies of the Federal Government have very definitely had an impact on our governmental activities here in San Juan County. This concludes the comments that I would share with this committee. I have one question that I would like to submit on behalf of the San Juan County Commission. We would like to know what your secret formula is to vote a pay increase without increasing revenues and without an affirmative vote of both bodies, if you have that answer.

[The prepared statement of Mr. Karlin follows:]

R. E. KARLIN
Chairman

ROBERT A. SMITH
Chairman Pro Tem

DONALD BENALLY
Member

MICHAEL B. SULLIVAN
Member

QUINCY C. CORNELIUS
Member

JIM NEBLETT
Manager
505-334-9481

San Juan County

112 S. MESA VERDE
AZTEC, NEW MEXICO 87410

February 27, 1987

Subcommittee on Energy & Natural Resources
Rayburn House Office Building
Washington, D.C. 20515

Attn: Senator Bennett Johnston

Dear Senator Johnston:

Thank you for the opportunity to speak on behalf of the San Juan County Commission concerning the impact of oil and gas production on services provided by county government.

As a native of this great state of New Mexico and a long time resident of San Juan County, I have seen many changes that have altered the lifestyle of residents of the four corners area of the United States. As a County Commissioner from District No. 4, I am fortunate to know the residents well. As a school administrator for a quarter of a century. I have seen the changes evolve that has brought about understanding of the three distinct cultures in New Mexico and San Juan County. Together we strive to meet the needs of San Juan County residents.

We are pleased that we are permitted to share with you some of the problems we face during this period of depressed oil and gas activity in New Mexico and the southwest.

Sincerely,

RE Karlin

R. E. Karlin, Chairman
San Juan County Commission
San Juan County, Aztec, NM

REK/lt

SAN JUAN COUNTY IMPACT REPORT

"ENERGY DECLINE"

PRESENTED TO:

COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

U.S. SENATE OVERSIGHT HEARING
CHAIR - U.S. SENATOR BENNETT JOHNSON
FARMINGTON, NEW MEXICO

prepared by:
SAN JUAN COUNTY
MARCH 2, 1987

R. E. KARLIN
Chairman

ROBERT A. SMITH
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112 S. MESA VERDE
AZTEC, NEW MEXICO 87410

March 2, 1987

Senator Bennett Johnston
Subcommittee on Energy & Natural Resources
Rayburn House Office Building
Washington, D.C. 20515

STATEMENT OF IMPACT, SAN JUAN COUNTY, NEW MEXICO

San Juan County, the northwestern most New Mexico county, bordering three (3) states and containing two (2) great sovereign Indian Nations, has experienced a dramatic socioeconomic impact upon its citizenry.

Natural gas, oil, power, and production equipment have played a significant role in the development of San Juan County over the past decade and a half. With that growth has been continued infrastructure development. That growth has been not only in support of the aforementioned natural gas and oil industry, but also the power industry with its related coal mining development and the subsequent residential development outside of our three (3) municipalities. Better than half of the residents reside outside of incorporated areas. That directly relates to roads, school bus routes, police and fire protection, ten (10) water user associations supplying our domestic water needs, educational institutions and ten (10) volunteer fire districts outside of the incorporated areas, in other words, massive doses of infrastructure.

With the departure of Revenue Sharing, utilized historically for infrastructure projects and our equipment for the ten (10) volunteer fire departments with their associated EMS rescue units, San Juan County had to reevaluate its funding requirements. We were able to successfully obtain a 1/4% gross receipt tax for the next five (5) years to be used expressly for fire and EMS rescue equipment. This is imposed in the unincorporated areas only. However, simultaneously to that impact came the worldwide downturn in oil and subsequently natural gas prices. Although San Juan County only realizes ten percent (10%) of its total production income from oil, its decline like natural gas hits home socioeconomically several ways. Couple that with a determination several years ago by the State of New Mexico to reassess real property throughout the state at 75-80% of current market value, the impact was felt differently in areas of the County. Due to rapid growth and the need for greatly expanded educational facilities, citizens historically and progressively passed school bonds. Because of sound oil and natural gas production, the primary cost of the bonds were born by gas and oil production taxes. However, with massive declines in oil prices and what some have considered 'Preditory Pricing Practices' by Canada - squeezing off our west coast market for natural gas, the tax payer was hit simultaneously with layoffs at the work station and increased property taxes.

More specifically the Bloomfield area saw 90% increases; Lower Valley areas (south and west of Farmington) 80% increases; Aztec, Farmington and Flora Vista areas averaged a 70% increase. [Example: a market valued home of $75,000 saw increased taxes from $290 to $470 annually.]

During this same timeframe, Gramm-Rudman affected many federal social programs fiscally thus reducing our ability to assist the needy. The State also reduced or eliminated social programs to be able to meet minimum funding requirements. Couple that with a national trend to push programs of social impact to the lowest level of government where the need can be best determined. Trading dollars for volunteerism wherever possible has woven a web of entrapment for local governments. We here in San Juan County have felt that belt tightening probably harder than many areas of the country.

What has the impact been? Specifically, it has been a decrease of 59% of our oil and natural gas production revenues, 100% decrease of our revenue sharing funding and the elimination or great reduction of funding for social programs and infrastructure funds. For example, funding for water supply, irrigation, waste water treatment, major and minor arterials, planning, fire and police protection and housing have been reduced or eliminated.

What actions have we taken - we squeezed $1.8 million from our 85/86 budget from November 1985 through June 1986. We then cut our annual 1986/87 budget by 16% ($3.15 million), froze salaries and funneled all remaining Revenue Sharing Funds into capital outlay equipment (excluded fire and EMS rescue units). The Board of County Commissioners was also forced to increase the operational millage from 5.3 to 6.5 on a valuation of $1.63 billion.

What can be done to assist local government in the performance of its duties?

First, the Board of San Juan County Commissioners support the Mojave Pipeline Project which would develop a new market in the magnitude of $400 - 500 million annually for natural gas.

Second, the Board of San Juan County Commissioners would suggest that the 'Preditory Pricing Practices' of Canada through projects like the Kearn River Project of Wyoming which would continue to circumvent San Juan Basin Natural Gas from entering all markets on the west coast, thus seriously crippling a viable U.S. industry, should be discouraged at all costs. This project is viewed as a conduit for Canadian natural gas.

Third, a sound policy on oil pricing would assure that this great country will not become dependent upon outside nations for its petroleum, thus, weakening or possibly eliminating a major industry that presently affects, production of equipment for repair and replacement of hard goods whose multiplier economic effect is just now being felt. The socioeconomic effect will be far reaching. Local trade will stagnate, disappearing dollars will affect the ability of the Board of San Juan County Commissioners to provide for the safety, preserve the health, promote the prosperity and improve the order, comfort and convenience of San Juan County and its inhabitants.

CONCLUSION:

Every effort has been made by the elected officials of San Juan County to trim costs, hold the line on costs and to assist the inhabitants of this County in the areas of social programs. We will continue to address to the best of our ability the infrastructure needs, in particular, the areas of roads, solid and liquid waste disposal and water for the future in the areas of municipal and industrial growth. However, some items cannot be addressed at this level of government and require immediate policy making decisions at the State and Federal levels of government.

San Juan County will continue to be proactive at the State level in the development of laws which would mitigate the cost of government within our state boundaries and promote a solid basis for growth.

We implore those at the national level to carefully evaluate policy that would strengthen our oil industry through whatever means necessary and to assist in the opening of markets for our national natural gas production. Our economic strength lies in such a strong national policy.

Senator BINGAMAN. I think that is a legitimate question. I defer to my colleague, who has more seniority to explain that.

Mr. KARLIN. If you have any questions, I'd do my best——

Senator BINGAMAN. Did you have any questions of Mr. Karlin?

Senator DOMENICI. No. He just ended it.

Senator BINGAMAN. Thank you very much for the testimony. We appreciate it. Our next witness is Bob Bayless, who represents the Independent Producers Association as past president of the Independent Producers Association in New Mexico and chairman of the board of the San Juan Regional Medical Center. You've been an independent producer here many years. We're anxious to hear your testimony.

STATEMENT OF ROBERT L. BAYLESS, ON BEHALF OF THE INDEPENDENT PRODUCERS ASSOCIATION

Mr. BAYLESS. Thank you Mr. Chairman, Senator Domenici. My topic basically will be the history of the oil and gas business for the last 100 years in the United States, or the wheel goes 'round and 'round or how can we achieve some economic security in the supply of hydrocarbon fuel to our economy. And basically it's going to be a little history resume and I believe what I'm trying to say America needs to learn.

Traditionally America has achieved the high standard of living that we have by having access to our own fuel supply, whether it be oil, natural gas or coal.

Looking at fuel on a historical basis, the story is well known of going back to the Civil War times when oil and gas was found in Pennsylvania and it spread—exploration spread into Ohio, Kentucky, Illinois and by the turn of the century we were down into looking for oil and gas in Kansas, Oklahoma, and Texas. In fact, southeastern Kansas in the late 1800's and early 1900's was a booming area for oil and gas exploration and production. It was responsible for industrialization of that part of the United States which had hitherto had been purely agricultural but because of the supply of natural gas smelters and foundries sprung up and some of these are in existence today.

Now, some of the history comes about because the situation arose that producers were completely dominated in that part of the country by a large cartel/trust known as the Standard Trust. And because of the inequities and injustices caused by that trust, we had the antitrust laws of 1909–1911, which broke up the Standard empire. Things went smoothly, relatively speaking, for fuel in this country.

In the late 1930's gas lines were beginning to be laid. In fact, in 1930 a gas line was laid out of the Farmington area into Albuquerque. And they are going to be laid out of the Midwest, where there was considerable gas, into St. Louis, Chicago and on to the East. In 1938 a law was passed which basically caused those pipelines to become public utilities, and that was passed because of fear of domination of a market by a very powerful entity.

But gas continued to be primarily a waste product, the prime product being oil. But then when World War II came along and after the war, well, there was more and more demand for this type of fuel because of its ease of handling, its cleanliness. It was just a special fuel. And in the early 1950's a pipeline was built out of the Farmington area into California by El Paso Natural Gas. Now we come to a key point. In 1951 prices were frozen at the wellhead. This was under an extention of the law of 1938. And there is a serious question whether that was the intent of the law of 1938, but that's the net result.

So, the price of gas was frozen and as a consequence, although there had been certainly an adequate—in fact, probably you would call it a balloon supply at that point during the last of the 1950's and the 1960's—drilling was not done. And finally we came to the 1970's. We now have a shortage of natural gas; and the country, the Nation was told that there was very little natural gas remaining to be found.

Through the good efforts of Senator Domenici and other folks in 1978 the NGPA was passed, which released some gas from price controls; it enabled deep gas to be drilled; it enabled shale gasses, coal gasses to be found without—to be sold without price controls. This caused a tremendous boom in drilling; and I think everybody in this room remembers the boom of the late 1970's, which ended in 1981.

But what did happen was there was a tremendous amount of natural gas found that had been indicated that couldn't be found; but it was found, ready to produce. Quantities that came on the market were large. Then came the bust of 1981 when the country became aware that we had a lot more gas than what we had thought we had. Some of the high priced gas simply could not clear the market, and there was a tremendous drop in activity.

From 18—from 1981 on we've been suffering from what's known as the "gas bubble" and its very slow disappearance. People varied in their estimation of when the gas bubble was going to end. I don't think any rational people feel that it will not end. You simply cannot take a depleting resource and produce it for a prolonged period of time and not have additions of more of that resource and not use it up.

At the same time these gyrations were going on in the natural gas market, the oil market was experiencing somewhat the same problems. During the 1950's and 1960's we became accustomed to buying very, very low-priced oil out of the Middle East primarily.

These countries gradually gained control of their natural resources through either naturalization or through OPEC; and they had no finding costs involved, they simply took over an industry that was already in place. And through their control the market price shot up abruptly. And this was devastating to many of our domestic industries because of the violent erratic swing of prices.

Price of oil went up into the high $30's for a while. This brought on added exploration throughout the world, throughout our country; and prices fell back into the high $20's. Then this past year we've seen the price go down even under $10. Now, I don't think anybody feels that you can go out and find oil in the $10 to $20 range and produce it.

But that's not to say that the countries that hold these tremendous reserves and have no finding costs involved—they nationalized the companies that were there—that's not to say that they can't produce this oil at $10 or less for a prolonged period if they see it in their—to their benefit. They have very little cost involved. Well, since the low of $9 and $10 oil last summer, oil has crept up, back to the $16-$17 range; but this is still below the price that could justify exploration hardly anywhere in the United States or the North Sea or anywhere in the world.

I happen to have a brother that runs operations in the North Sea out of London and I talk to him very, very frequently and the experience that's going on in England is just the same as going on here in America, the exploration has just been devastated, is not being done. What all of you can see on the charts that are up in front of you is a very violently fluctuating, erratically swinging cost of fuel to our country. This has a very unsettling impact on industries which are very intensively consuming energy.

It's also already been alluded about the airline, for example, where fuel is one of their basic costs. They see these costs swings; and certainly they like the down side; they very much do not like the up side. Here in the San Juan Basin there's been an absolute shutdown of drilling for oil and gas because of pricing and lack of market.

The market that we have for natural gas in California has been cut by half to two-thirds, both in price and volume. This cut has been brought on by several factors: we have competition with low priced oil for eastern crude that are used as bunker fuels in our generating plants there; we have the importation of substantial quantities of gas from Canada. These quantities are coming in—prices running less than 25 percent of what they were two to three years ago.

I think it's important not to be derogatory about Canada, to remember that back in the early—late 1970's and early 1980's Canada was leading the price march for raising the price of natural gas and they thought they could get that price and they were able to. The market would support it at that time.

Now that it doesn't, they are cutting their prices so substantially that we in the San Juan Basin simply cannot compete. Another factor that's very significant is that the major utilities companies in California have found that they are able to cancel contracts, abrogate contracts with their pipeline and conventional producers at their will.

The California Public Utility Commission is encouraging that they cancel contracts so that they can buy gas at the cheapest price possible wherever it's available. Various people have talked to the people in California and pointed out the very nearsightedness of this concept, but to date there has been very little done about it. All of these factors above result in the fact that in February, I believe, there were no drilling rigs working in the San Juan Basin.

That's the first time in over 30 years that there were no drilling rigs running in the basin. The number of wells—you have charts to show how few are being drilled—and the seriousness of this problem is that the California market, when prices—when gas supplies do become tight, they will not be able to wait on the normal lag that it takes between the time that people start to explore, drill, complete wells then hook up to pipe lines. This is a long, drawn-out procedure; and the California folks will simply not understand why the gas is not available the moment they want it.

They have benefited so from what they call the "spot market" that it's going to be very difficult—politically it's going to be very difficult because the people in California control such a substantial number of votes.

So what we're going to do is see the same situation that came about in the early 1970's before the NGPA was passed in 1978. Now, talking to those items alone doesn't even take into consideration the internal situation that we've discussed a little bit earlier. In the Mideast they have absolute control of as much as half of the substantial portion of the world reserves that what goes on there in the matter of wars, what goes on in the matter of politics, allegiance between various areas have a tremendous impact on what goes on here in the San Juan Basin. This brings us down and boils down to the absolute essentialness of having a stabilized market in the United States for both natural gas and crude oil.

In the case of crude oil a graduated tariff that would phase out at certain price levels should be acceptable to all factors of our country, because stability in the long run is much more desirable than simply a present day low price. And it would get rid of the wildly speculative fluctuations of pricing on crude oil. Another thing that could be very, very helpful would be to get rid of the problem of cancelling of contracts on gas supplies, because this brings about a perception in the industry that a contract is not a contract; and, so, you cannot base your exploration program on any type of a contractual arrangement.

The above situation has aggravated, or had a real impact on our banking system in this country, which will be discussed in greater length. But, frankly, the oil and gas industry is depend—has depended on banking in the past, and when we have—you have a situation today where prices fluctuate so widely without any real reason other than the cartel in the Middle East has made a decision, this gives banks an awful lot of, you know, uneasiness to participate in the financing of exploration.

To capsule all of the above, our country needs to maintain the growth and standard of living that we've come to expect, and the only way that we can do that is by having stability in our fuel supplies in this country. And it does not make sense that we be subject to such wild fluctuating manipulations of prices which are brought on by the suppliers of fuel from abroad.

These countries have proven to us, I think, very well that they are interested solely in their own welfare; and it is incumbent upon us as a country to have legislation which will promote a sound energy industry and energy supply base for this country. And this requires a stable, coherent national energy policy. Hopefully we will not repeat our mistakes of the past and repeat the rationing, the allocations, the price controls that we have had within our recent history. The basic lesson is we should learn from history. Thank you.

[The prepared statement of Mr. Bayless follows:]

TESTIMONY PRESENTED BEFORE THE
UNITED STATES ENERGY & NATURAL RESOURCES COMMITTEE
FIELD HEARING - FARMINGTON, NEW MEXICO

Robert L. Bayless

March 2, 1987

Thank you gentlemen for allowing me to speak before you today. My topic basically will be "The Wheel Goes 'round and 'round, or History of the Oil and Gas Business For the Last One Hundred Years, or How Can We Achieve Some Economic Security in the Supply of Hydrocarbon Fuel to Our Economy."

Traditionally, America has achieved its high standard of living by having access to relatively low-cost fuel, whether it be oil, natural gas or coal.

Looking at fuel for our country on an historical basis, the story is well known of Civil War times when oil and gas was found in the Northeastern United States and exploration quickly spread throughout Pennsylvania, Ohio, Kentucky, Illinois, and by the turn of the century was moving into the mid-continent area of Kansas, Oklahoma and Texas. In fact southeastern Kansas, in the late 1800's and early 1900's was a real booming area for oil and gas exploration. It was responsible for an industrialization of that part of the United States which hitherto had been purely agricultural, but because of the supply of inexpensive gas, smelters and foundries sprang up and some are still in existance to this day. However, the situation arose where the producers were completely dominated by a large cartel/trust, known as the Standard Trust, and because of the inequity and injustices caused by that trust, the anti-trust laws of 1909-1911 broke up the Standard Empire. Things went along smoothly then with new discoveries being made in the Texas/Oklahoma areas until the late '30's when gas lines were beginning to be laid from the Midwest into Chicago, St. Louis, and on to the East. At that time a law was passed basically causing those pipelines to become public utilities. Gas continued to be a waste product, or at least a by-product, with the prime product being oil. Then following

World War II, gas became more and more in demand because of its ease of handling, cleanliness, etc., and then in the early '50's a pipeline was built out of this area into California by El Paso Natural Gas. It was also in 1951 that prices were frozen to the producer at the wellhead under an extension of the law of 1938. There was a serious question of whether that was the intent of the law, but that is how it worked. So, you had the price of natural gas frozen and as a consequence, although it had been very plentiful, the supply slowly dwindled and there was very little drilling done until finally, in the '70's, we had a shortage of natural gas. In fact, the nation was told that there was very little natural gas remaining to be found. Through the good efforts of Senator Domenici and other folks in 1978, the NGPA was passed which released some gas from price controls, enabled deep gas to be drilled and sold without price controls, the same on shale, coal gas, etc. This created a tremendous boom in drilling and a tremendous new source of natural gas. Quantities that nobody dreamed existed were found and brought to market. What came next was the big bust at the end of 1981 when suddenly we became aware that we had more gas than we had a use for at that particular moment at those prices. And from 1981 to this date we have been suffering what is known as the "gas bubble" and its slow dissappearance.

At the same time these gyrations were going on in the natural gas market, the oil market was experiencing somewhat the same problems. We had during the '50's and '60's become accustomed to buying extraordinarily low priced oil out of the Middle East primarily, but as those countries gained control of their natural resources through OPEC, nationalization of foreign owned companies, and other devices the market shot up abruptly, devistating to many domestic industries. The price of oil rose to the high-$30/barrel range for a while. This, of course, also brought on much added exploration around the world and the price fell back into the high $20's. Then this past year, we saw it go down into the teens and even go under $10. Obviously, there is very little oil that can be found and developed at these prices. That is not to say that countries with more bountiful supplies of oil already drilled, already developed, in the Middle East cannot make money by selling at that price, but they are using up their reserves and it severely limits any exploration work that can be done around the world. Since mid-summer when it was in the $9 and $10 range, oil has crept up to the $16-$17 range but this is still far below any price that can justify exploration whether it be in the United States, or the North Sea, or basically anywhere in the world, and because of this exploration has practically died. One exception is where people have perceptions that the production in the next few years will bring substantially higher prices. Some companies are willing to bet that at today's relatively low costs the oil found will bring a substantially higher price in the relatively near future, but domestically apprehension over the windfall profits tax acts as a dampener.

What all of this has done to the United States, when you look at it on a chart, is to have some violently fluctuating, eratically swinging costs of energy. This has had a particularly unsettling impact on those industries which are intensively energy consumptive, petro-chemicals for example, or the airlines in their fuel usage - this has been a very difficult time for them to cope with wildly fluctuating prices.

Here in the San Juan Basin we have seen an absolute shut-down of drilling for oil and gas simply because of pricing and the lack of market. We have seen the market in California for natural gas be abruptly cut by half to two-thirds both in price and in volumes. This cut has been brought on by several factors: competition with very low priced oil being used as bunker fuel in generating plants; secondly, the importation of substantial quantities of Canadian gas at very low prices (prices running as low as 25% of what the Canadians were charging for this same gas five years ago); thirdly, the ability of the major utility companies in California to cancel and abrogate their contracts and buy distressed gas in various parts of the country and have it transported over the pipelines going into California.

The net result of the above factors, as well as others, has been that for the first time in over 30 years there are absolutely no drilling rigs working in the San Juan Basin. There have been practically no wells drilled now in the last six months because the perception is that the gas market will not improve for a prolonged period and there is no benefit in proving up new reserves or new deliverability under these conditions. The seriousness of the problem is that the California market, when gas supplies do become tight, will not be able to wait on a normal lag time that is involved in exploration, drilling, hooking-up to pipelines new wells. This means there will be a shortage of natural gas in the area that will cause a violent fluctuation in the "spot price" market and we will see the same situation arise that was developing in the early '70's before the passage in 1978 of the NGPA.

This doesn't take into consideration the erraticness and volitility of the oil market and of course any type of an international upheaval in the Mideast could cause prices to escalate tremendously and this would aggrivate the natural gas problems because of the competition and multiple usage in many generating stations and industrial plants which have the ability to use both bunker fuel and natural gas as a fuel.

What all of the above boils down to is the absolute essentialness of a stabilized market in the United States for both natural gas and crude oil. In the case of crude oil, this could be brought on by a graduated tariff that phases out at certain price levels which would have the effect of reducing wildly speculative fluctuations of pricing on crude oil. On natural gas, the problem has been aggravated in many instances by various legislative and commission actions which have in effect abrogated or negated contracts in existance between pipelines and producers of natural gas. This has created the perception that no contracts are valid if the economic position of one of the parties can be enhanced by cancellation of contracts.

Both of the above situations are aggravated by the severe impact that the oil and gas industry has had on the banking system. The bad loans that came about during the late '70's and '80's era have caused the banks to be wary and apprehensive of oil loans based on the experience of the last few years.

To capsule the above, our country needs to maintain the growth and standard of living we have come to expect. It is absolutely essential that we have stability in our fuel cost in this country and itdoes not make sense that we be subject to the wildly fluctuating, manipulations of prices which are brought on and caused by suppliers of portions of our fuel from abroad. These countries have proved time after time that they are interested soley in their own welfare and it is incumbent upon us as a country to have legislation which will promote and secure a sound energy industry and energy supply base for this country.

Gentlemen, we must have a stable, coherent national energy policy. We must not repeat our mistakes of the past and repeat rationing, allocations and price controls we have experienced so recently.

Thank you.

Senator BINGAMAN. Thank you very much. Let me ask one question, Bob, before you sit down, if I could. On the marketing of gas in the California market, one of the proposals that is being considered, or has been suggested, is that we provide some limited antitrust exemption for independent producers to allow them to market crude oil and natural gas. Is that something that would be useful, or is that sort of beside the point, in your view?

Mr. BAYLESS. I think it would useful. I certainly don't think it will be a cure-all, but I think it would be useful.

Senator BINGAMAN. Pete, do you have some questions?

Senator DOMENICI. No. I don't think so. We have talked, and I think we understand each other.

Senator BINGAMAN. Let's move on to the next witness. Let me urge, if we can, everybody to try to keep their testimony within the maximum of 10 minutes so that we can get through everybody here before lunch.

Dave Baker is our next witness. Dave was previously with Shell Oil Co., for 16 years the former vice president of exploration for Transocean Oil Co., former president of Pelta Oil Co. in Houston and currently an independent oil and gas consultant. We are glad to have you here.

STATEMENT OF DAVID A. BAKER, INDEPENDENT OIL AND GAS CONSULTANT

Mr. BAKER. Thank you, Mr. Chairman. Not long ago I paid a substantial portion of my income for the cost of operating our Government; and now that I pay a much smaller share of that cost, I sincerely appreciate your contribution of time and effort in listening to our comments this morning. Oil prices are an important factor in the current economics of the natural gas business; therefore, my initial comments will address our natural gas supply situation; 85 to 90 percent of our national natural gas consumption must be satisfied through domestic supplies. This fact, coupled with the drastic reduction in drilling activity, could create a serious near-term supply problem in the United States. Not being an economist, the problem seemed relatively simple to analyze, which I attempted to do in July of 1986. Most of the historical data necessary for this study is from the Energy Information Administration. If you could please refer to figures 1 and 2 there. Do you have a copy of those graphs in front of you?

Senator BINGAMAN. Yes, we do.

Mr. BAKER. On figure 1 the red curve illustrates the rapid rate of decline in crude reserves—these are gas reserves now—from 1967 through 1978. Fear of a natural gas shortage and increased oil and gas prices resulted in a dramatic upsurge in drilling activity which exceeded 4,000 active rigs in late 1980. These are shown on the green curve. That is the drilling activity. The problem in arresting the decline in natural gas reserves is revealed by the fact that our reserve level did not increase from 1979 through 1983, a period which witnessed the highest level of drilling activity in our history. In other words, our reserve level was only stabilized.

It did not increase above that 4,000 rig level. By 1985, drilling activity had fallen to an average of 2,000 rigs per day, resulting in a renewed decline of reserves. Now, if you would please refer to the green curve on figure 2, and note that our production—or consumption in 1985 was 16.4 trillion cubic feet while our reserve additions, which is shown on the red curve, were only 10 trillion cubic feet. This shortfall occurred when drilling activity averaged 2,000 rigs per day. At the current drilling level of 800 rigs per day, reserve additions in 1986 and 1987 are forecast to be less than 5 trillion cubic feet per year which would result in a proved reserve base of approximately 138 trillion cubic feet by the end of 1987 which would represent an 8-year supply.

It is my understanding the major pipeline companies at one time considered an 8-year supply, a minimum requirement to stay in business. Based upon recent historical performance, drilling activity would need to average 2,500 rigs per day right now in 1987 just to replace our current annual consumption and maintain and 8-year supply of natural gas, which really isn't enough. In 1985, our excess deliverability—that is, our productive capacity in excess of consumption—was 2.9 trillion cubic feet.

This is illustrated now by the blue curve on figure 2. This excess, sometimes described as the "gas bubble," resulted from the enormous increase in drilling activities from 1979 through 1982. Prior to 1984, deliverabilities declined at an average of 10 to 12 percent of production each year. Assuming similar declines and current rates of consumption, reserve additions and drilling activity, our excess deliverability should disappear in 1988.

When this occurs, we will be faced with the potential for severe supply shortages which will not be relieved through imports; but we can anticipate a fly-up in imported gas prices. We are fortunate in the United States to have a potential for large, undiscovered gas reserves, much of it in tight reservoirs and deep reservoirs and far-offshore reservoirs. The USGS estimates our undiscovered reserves at approximately 600 trillion cubic feet.

These reserves can be obtained only through significantly increased drilling activity, which will require substantial price increases. My chief concern is that OPEC will attempt to maintain oil prices in the range of $20 to $22 a barrel over the next 2 or 3 years. If they are successful, there will be no significant increase in exploratory drilling, and our oil and gas reserves will continue their rapid decline. At these price levels the natural gas supply crisis is almost assured.

Oil consumption would increase, import levels would have reached or exceed 50 percent; and our oil prices could rise to $50 per barrel by 1992. Under these conditions our annual balance of payments deficit due to oil imports alone will be a staggering $155 billion, and the impact on our economy would be catastrophic. We simply must reverse our growing dependency on imported oil.

A self-sufficiency level of 70 percent is attainable and would alleviate any energy-related threat to our military or economic national security. A strong domestic oil and gas industry can achieve this objective, but not without price stability; and price stability will not be possible without Government intervention. Only the most naive political leaders, and probably none of the investment community, would risk reliance on OPEC to stabilize the world oil market.

There is no "free-market" in the international oil business. How can there be when 80 percent of the world's oil production is state owned? The administration's rhetoric about "free-market" in oil is an embarrassment to me and, hopefully, it is to you. During the past one and a half years significant expenditures in the oil and gas industry have been directed toward mergers and the purchase of producing properties.

We cannot argue that these are not wise investments in view of the depressed oil and gas prices; however, these investments do nothing to stem the decline of domestic reserves and only accelerate our dependency on imported oil. In my opinion a floor price should be established in the range of $25 to $30 a barrel on imported oil and equivalent products without exception. I believe this price range is the minimum necessary to reverse the decline in both our reserves and production capacity.

If we are unable to accomplish this, we will be exchanging a few years of euphoria due to undervalued energy prices for potential economic disaster in the early 1990's. Our legislators from the nonproducing states, particularly in the Northeast, must somehow understand the economic implications of the future oil shock.

The suggested floor price approximates oil prices comparable to the those in late 1985. At that time the average pump price of unleaded gasoline was a $1.20 per gallon. While this would be a significant increase over the current 90 cents per gallon, it may still be lower than its real value from a standpoint of a depletable resource, and probably one-half the average price that would be paid in the other major industrialized free countries.

In summary, if we are to avert very serious damage to the economic national security of the United States, we must reduce our level of dependency on imported oil. If we wait until oil imports total 50 percent of demand before we study our options, it is doubtful a weakend domestic industry, which requires long lead-times even when healthy, could respond quick enough to prevent the economic crisis. Stable domestic oil prices must be established at the earliest reasonable opportunity. I cannot envision any reliable alternative to Government intervention in achieving this stability. Thank you.

[The prepared statement of Mr. Baker follows:]

STATEMENT OF DAVID A. BAKER

SUBMITTED TO THE

UNITED STATES SENATE ENERGY AND NATIONAL RESOURCES COMMITTEE

FIELD HEARINGS

FARMINGTON, NEW MEXICO

MARCH 2, 1987

Oil prices are an important factor in the current economics of the natural gas business; therefore, my initial comments will address our natural gas supply situation.

Eighty-five to ninety percent of our natural gas consumption must be satisfied through domestic supplies. This fact, coupled with the drastic reduction in drilling activity, could create a serious near-term supply problem in the United States. Not being an economist, the problem seems relatively simple to analyze, which I attempted to do in July, 1986. Most of the historical data necessary for this study is from the Energy Information Administration. (Please refer to figures 1 and 2.) On figure 1, the red curve illustrates the rapid rate of decline in proved reserves from 1967 through 1978. Fear of a natural gas shortage and increased oil and gas prices resulted in a dramatic upsurge in drilling activity (as shown by the green curve on figure 1) which exceeded 4,000 active rigs in late 1980. The problem in arresting the decline in natural gas reserves is revealed by the fact our reserve level did not increase from 1979 through 1983, a period which witnessed the highest level of drilling activity in our history. By 1985, drilling activity had fallen to an average of 2,000 rigs per day resulting in a renewed decline in reserves. (Please refer to green curve on figure 2.) Note that our production in 1985 was 16.4 trillion cubic feet while our reserve additions shown by the red curve were 10 trillion cubic feet. This shortfall occurred when drilling activity averaged 2,000 rigs per day. At the current drilling level of 800 rigs per day, reserve additions in 1986 and 1987 are forecast to be less than 5 trillion cubic feet per year, resulting in a proved reserve base of approximately 138 trillion cubic feet by the end of 1987. This would represent an eight year supply. It is my understanding the major pipeline companies, at one time, considered an eight year supply a minimum requirement to stay in business. Based upon recent historical performance, drilling activity would need to average 2,500 rigs per day in 1987 just to replace our current annual consumption and maintain an eight year supply of natural gas. In 1985, our excess deliverability, that is, our productive capacity in excess of consumption, was 2.9 trillion cubic feet (this is illustrated by the blue curve on figure 2). This excess, sometimes described as the "gas bubble", resulted from the enormous increase in drilling activity from 1979 through 1982. Prior to 1984, deliverability declined at an average of 10 to 12 percent of production per year. Assuming similar declines and current rates of consumption, reserve additions, and drilling activity, our excess deliverability should disappear in 1988. When this occurs, we will be faced with the potential for serious supply shortages which cannot be relieved through imports; but we can anticipate a fly-up in imported gas prices.

We are fortunate in the United States to have the potential for large, undiscovered gas reserves, much of it in tight reservoirs (that is, those with low productive rates, but long-life), deep reservoirs, and far-offshore reservoirs. The USGS estimates our undiscovered reserves at approximately 600 trillion cubic feet. These reserves can be obtained only through significantly increased drilling activity, which will require substantial price increases.

My chief concern is that OPEC will attempt to maintain oil prices in the range of $20 to $22 per barrel over the next 2 or 3 years. If they are successful, there will be no significant increase in exploratory drilling and our oil and gas reserves will continue their rapid decline. At these price levels, a natural gas supply crisis is almost assured, oil consumption will increase, import levels will reach or exceed 50 percent, and oil prices could rise to $50 per barrel by 1992. Under these conditions our annual balance of payments deficit due to oil imports alone will be a staggering $155 billion and the impact on our economy would be catastrophic.

We simply must reverse our growing dependency on imported oil. A self-sufficiency level of 70 percent is attainable and would alleviate any energy related threat to our economic or military national security. A strong domestic oil and gas industry can achieve this objective, but not without price stability, and price stability will not be possible without Government intervention. Only the most naive political leaders, and probably none of the investment community, would risk reliance on OPEC to stabilize the world oil market. There is no "free-market" in the international oil business. How can there be when 80 percent of the world's oil production is state owned? The Administration's rhetoric about "free-market" in oil is an embarrassment to me and, hopefully, it is to you.

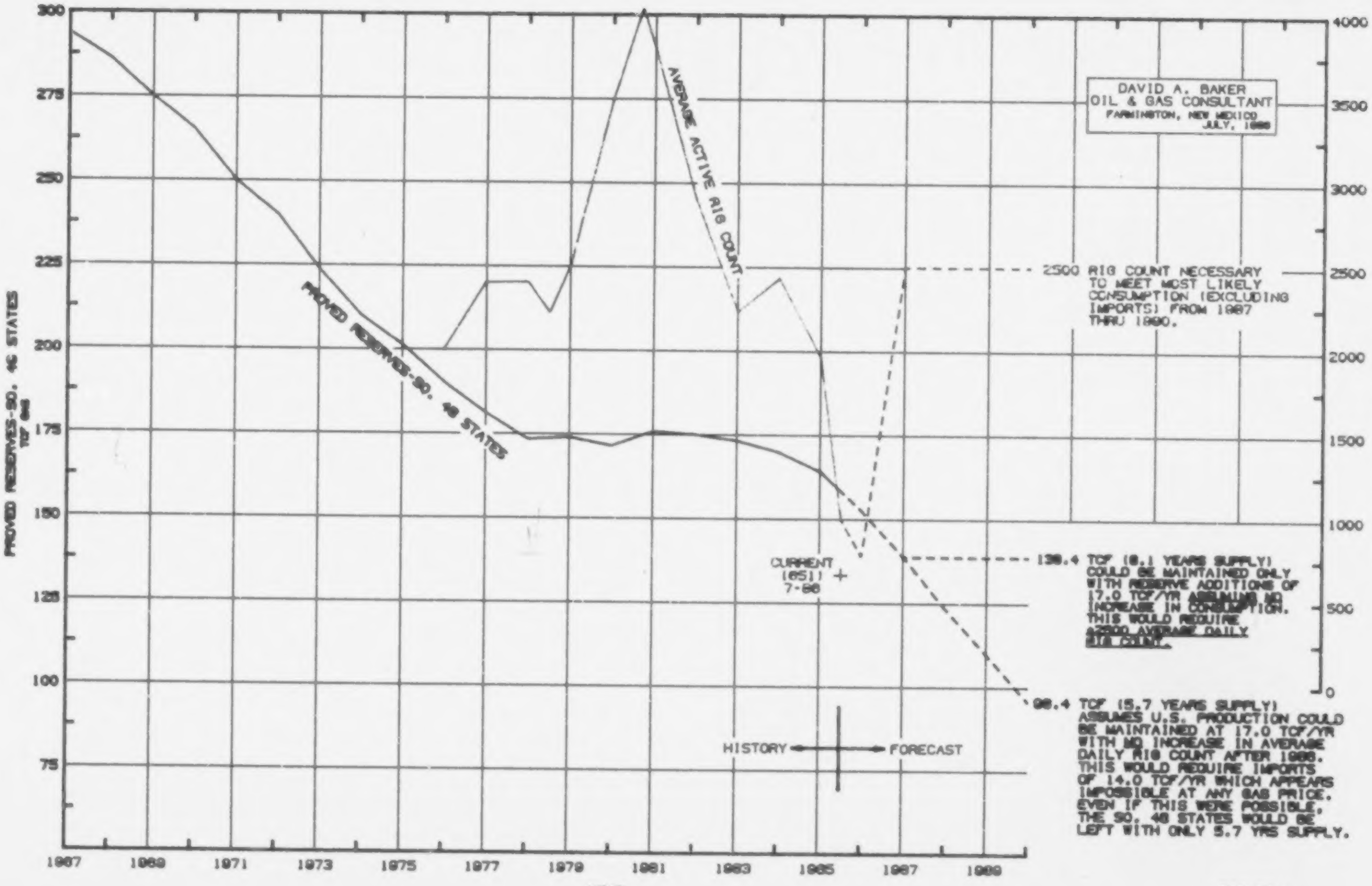
During the past 1 1/2 years, significant expenditures in the oil and gas industry have been directed toward mergers and the purchase of producing properties. We cannot argue that these are not wise investments in view of depressed oil and gas prices; however, these investments do nothing to stem the decline in domestic reserves and only accelerate our dependency on imported oil.

In my opinion, a floor price should be established in the range of $25 to $30 per barrel on imported oil and equivalent products, without exception. I believe this price range is the minimum necessary to reverse the decline in both our reserves and production capacity. If we are unable to accomplish this, we will be exchanging a few years of euphoria due to undervalued energy prices for potential economic disaster in the early 1990's. Our legislators from the non-producing states, particularly in the Northeast, must, somehow, understand the economic implications of a future oil shock.

The suggested floor price range approximates oil prices comparable to those in late 1985. At that time the average pump price of unleaded gasoline was $1.20 per gallon. While this would be a significant increase over the current $.90 per gallon price, it still may be lower than its real value from the standpoint of a depletable resource, and probably one-half the average price that would be paid in the other major industrialized free countries.

In summary, if we are to avert very serious damage to the economic national security of the United States, we must reduce our level of dependency on imported oil. If we wait until oil imports total 50 percent of demand before we study our options, it is doubtful a weakened domestic industry, which requires long lead-times even when healthy, could respond quickly enough to prevent an economic crisis. Stable domestic oil prices must be established at the earliest reasonable opportunity. I cannot envision any reliable alternative to Government intervention.in achieving this stability.

David A. Baker
Oil and Gas Consultant
Farmington, New Mexico
March 2, 1987



DAVID A. BAKER
OIL & GAS CONSULTANT
FARMINGTON, NEW MEXICO
JULY, 1986

2500 RIG COUNT NECESSARY TO MEET MOST LIKELY CONSUMPTION (EXCLUDING IMPORTS) FROM 1987 THRU 1990.

138.4 TCF (8.1 YEARS SUPPLY) COULD BE MAINTAINED ONLY WITH RESERVE ADDITIONS OF 17.0 TCF/YR ASSUMING NO INCREASE IN CONSUMPTION. THIS WOULD REQUIRE 2500 AVERAGE DAILY RIG COUNT.

98.4 TCF (5.7 YEARS SUPPLY) ASSUMES U.S. PRODUCTION COULD BE MAINTAINED AT 17.0 TCF/YR WITH NO INCREASE IN AVERAGE DAILY RIG COUNT AFTER 1986. THIS WOULD REQUIRE IMPORTS OF 14.0 TCF/YR WHICH APPEARS IMPOSSIBLE AT ANY GAS PRICE. EVEN IF THIS WERE POSSIBLE, THE SO. 48 STATES WOULD BE LEFT WITH ONLY 5.7 YRS SUPPLY.

FIGURE 1

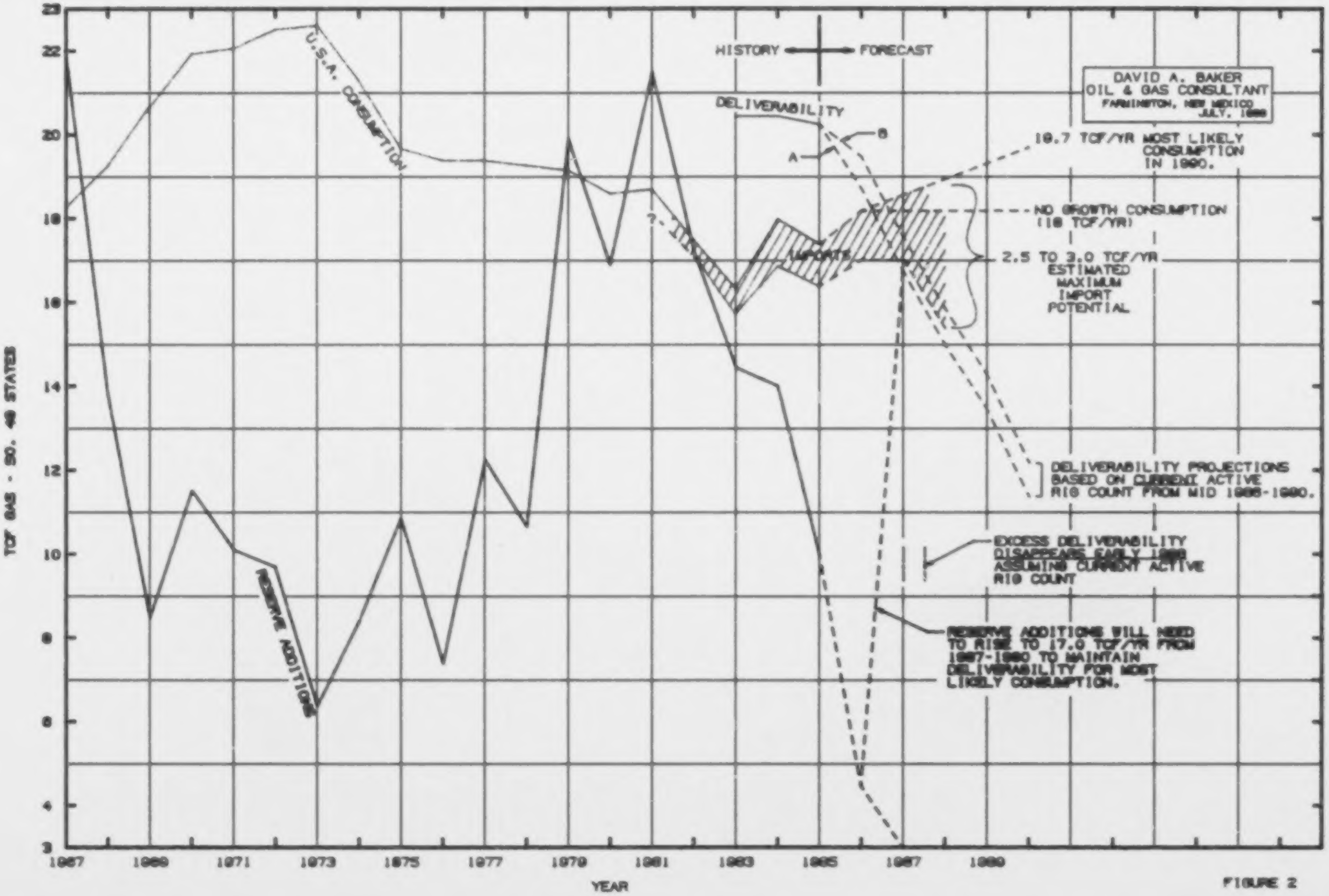

HISTORY ← → FORECAST
DAVID A. BAKER
OIL & GAS CONSULTANT
FARMINGTON, NEW MEXICO
JULY, 1988
U.S.A. CONSUMPTION
RESERVE ADDITIONS
DELIVERABILITY
A
B
?
IMPORTS
19.7 TCF/YR MOST LIKELY CONSUMPTION IN 1990.
NO GROWTH CONSUMPTION (18 TCF/YR)
2.5 TO 3.0 TCF/YR ESTIMATED MAXIMUM IMPORT POTENTIAL
DELIVERABILITY PROJECTIONS BASED ON CURRENT ACTIVE RIG COUNT FROM MID 1988-1990.
EXCESS DELIVERABILITY DISAPPEARS EARLY 1988 ASSUMING CURRENT ACTIVE RIG COUNT
RESERVE ADDITIONS WILL NEED TO RISE TO 17.0 TCF/YR FROM 1987-1990 TO MAINTAIN DELIVERABILITY FOR MOST LIKELY CONSUMPTION.
TCF GAS - SO. 48 STATES
23
22
20
18
16
14
12
10
8
6
4
3
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
YEAR

FIGURE 2

DATA SOURCES
for Figures I and II

Proved Reserves:

1967 - 84

API, Energy Information Administration (Morgan Stanley -Wellemeyer, 8-85)

1985

Energy Information Administration estimate (OGJ 5-12-86); Production in 1985 = 16.4 TCF less 10.0 TCF reserves added leaves shortfall of 6.4 TCF. Therefore, proved reserves at end of 1985 = 164.9 TCF.

1986-1990

Projected based on average rig count of 1000 for 1986 and 650 for 1987-90. Shortfall for 1986 would be 12.5 TCF and for 1987-90 would be 14 TCF/year.

Reserve Additions:

1967-84

Same source as for Proved Reserves.

1985

Natural Gas Supply Association (OGJ 5-12-86) projected liberally to be 10.0 TCF.

1986-90

Based on a reasonable correlation between rig count and new reserve addition, additions for 1986 projected to be 4.5 TCF and 3.0 TCF/year for 1987-90. Assumes no increase in rig count after mid-1986 through 1990.

Production - Consumption

1967-84

Same source as for Proved Reserves.

1985

Energy Information Administration (OGJ 5-12-86) estimates U.S. production at 16.4 TCF.

1986

Morgan Stanley-Wellemeyer, 8-85; Transco Energy Co., 6-86; Production estimate 17.0 TCF; Consumption estimate 18.2 TCF.

1990

American Gas Association (Morgan Stanley 8-85); Transco Energy Co., 6-86; Average estimate of consumption in 1990 = 19.7 TCF.

Drilling Activity

1976 TO July, 1986

Hughes Tool Co., OGJ 7-86, Active Rig Count in So. 48 states mid-July was 651 (lowest since early 1940's).

Deliverability

1983-85

Morgan Stanley (Arco Oil and Gas) 8-85; American Gas Association (OGJ 6-9-85) estimates surplus deliverability at 2.9 TCF in 1985.

1986

OGJ, 7-7-86 (Conoco estimates drop at 7-10% from 1985-1986).

RAM Group (OGJ 6-9-86) estimates possible 60% drop in gas well completions in 1986, which results in only .42 TCF/year of new deliverability in 1987. Based on the above estimates, this study uses a range for 1986 deliverability of 18.7 TCF (Curve A) and 19.5 TCF (Curve B).

1987-90

Based on 12% decline for pre 1984 gas (Morgan Stanley - ARCO Oil and Gas, 8-85).

RAM Group estimate (OGJ 6-9-86) for drop in 1986 deliverability, and projected for 1987-90 based on no increase in current rig count.

Senator **Bingaman**. Thank you very much.

Pete, did you have some questions?

Senator **Domenici**. I would ask just this question: There isn't any question there is no "free-market," but those who don't want to do anything rely upon another thing. They say that the cartel cannot work among itself to control prices and as a consequence we will be the beneficiary of that, the commotion that is forthcoming as a result of them fighting among each other. Would you just in a minute or so give us your version of that.

Mr. **Baker**. I can understand that feeling. My problem is: Can we afford to take the risk? I guess to turn the question around, what if they can control it? Then we have no alternative, in my opinion.

Senator **Domenici**. All right. Thank you very much.

Senator **Bingaman**. Thank you very much. We appreciate your comments and testimony.

Our next witness is Al Greer, representing the New Mexico Oil and Gas Producers Association and former State Senator from this district, past-president of the Independent Producers Association of New Mexico and someone who has been involved in the oil and gas industry here in Farmington for over 40 years. So, we're glad to have you testify today, Al.

STATEMENT OF ALBERT R. GREER, MEMBER, NEW MEXICO OIL AND GAS ASSOCIATION

Mr. **Greer**. Thank you. I'm pleased to be able to participate, and thanks again for the interest you people are showing in our problem.

As you are aware, the oil and gas industry as it has functioned over this past several decades is rapidly being dismantled as a consequence of unstable oil prices at untenably low levels. The low oil prices have had a depressing effect on both the price of gas and its market volume.

Clearly the stabilization of oil prices at higher than current levels would directly improve the economics of oil exploration and development and indirectly would improve the economics of exploration and development of gas. For this San Juan Basin area the indirect effect of oil pricing on natural gas economics is a consequence of the fuel switching abilities of the large utility and industrial markets of the West Coast.

I would like to emphasize a few significant points with respect to the revitalization of the oil and gas industry. The gas industry particularly faces adversities completely unknown in the past.

One point is the fact that the under current regulations the pipelines can no longer act as an intermediate and "cushioning" element between the producer and the consumer. In years past the pipeline purchaser 2was allowed to earn a profit on his marketing arrangements in such a way that it could afford to store gas to level the differences in market demand and producing ability. Further, it could guarantee the producer a market through take-or-pay contract provisions. The current regulatory climate does not permit this. As a consequence, for any given gas supply and its costs of development the producer will necessarily require a higher price than otherwise would be the case to warrant the risk of development in a climate of unstable prices and indefinite market. This has come about because of the regulatory authorities overreacting to the "open-access" principle.

Practically every year Congress and the Internal Revenue Service make more difficult the development of natural resources. An example, the last Congress' action, which might not be readily apparent, is the effective removal for the oil and gas industry of the limited partnership method of operation. We understand that the sentiment of the last Congress was that this method of operation was abused by some industries; but the use of it generally in the oil industry was simply to provide a means of reducing paperwork.

The income tax consequences of the limited partnership, which our company operates, is exactly the same for all participants whenever such operation was conducted as a limited partnership or, as more common in the past, joint venture. The only difference was the elimination of the mountains of paperwork the partnership afforded. Since this method of operation and financing is no longer available, more costly methods will be required to do the same job. This means a higher price necessary to develop a given resource.

There's already been elimination of many service companies from the industry; and in view of its recent past experience, there certainly can be no assurance that given the return of the industry to greater activity that these service companies can be revitalized. This means a probable shortage of service companies and consequent higher costs than otherwise would have been the case to do a given job. This translates into necessarily higher future prices for gas and oil for producers to develop any given resource.

In time our nation and the rest of the world must make the transition from oil and gas to alternative energy supplies. If energy costs are not moved gradually in the direction of the higher costs of the alternative supplies, the consequence at some future time will be a severe economic energy shock. The Persian Gulf nations have determined that they will keep the price of oil low enough that transition to alternative fuels cannot economically occur. Although these nations probably do not have the discipline to control prices on the high side, they certainly can control them such that they do not exceed a predetermined level; witness the result of only one country's marketing policies in 1986.

So the actions of the Persian Gulf nations, whether by happenstance or design, are controlling the prices such that there will be no gradual transition to alternative supplies, but rather the severe shock noted above will sometime occur. An intelligent treatment of oil pricing can avert the undesirable consequences of the actions of these Persian nations, which otherwise will result.

Oil and gas, even at the highest prices of the last decade, are exceptional bargains for the people of our nation when compared with other consumer costs; but our perception is that Congress does not appreciate this fact, nor does it appear that Congress understands that continual development is required to maintain the current levels of production. Rather, if gas and oil are continued to be produced at current levels, large expenditures will be required. Estimates by some authorities reach the $1 trillion amount if production is simply to be maintained at the current levels until the year 2000.

The benefits to our Nation of an economically healthy oil and gas industry are many; but if they are to be realized, a higher and more stable price for oil and its concurrent beneficial effect for gas is required.

Senator BINGAMAN. Al, let me just ask if in order to attain that higher and more stable price that you're talking about, is it your view that an import fee of some sort, minimum variable fee, is an appropriate action for the Congress to take; or is there something else that we could do that hasn't yet been recommended?

Mr. GREER. Well, it seems to me that for things that can be practically done by the United States that you have taken the proper course. There are other things that might be helpful in time; but from a practical, attainable standpoint the import fee is certainly the most practical way to move.

Senator BINGAMAN. Did you have any questions?

Senator DOMENICI. Just a couple. But I just asked——Mr. Bayless, do you agree that the Fuel Use Act is the most practical thing we can do from what we know at this point?

Mr. BAYLESS. The Fuel Use Act should be——

Senator DOMENICI. Did I say Fuel Use Act?

Mr. BAYLESS. That's what you said.

Senator DOMENICI. Do you think the import fee is the most practical and effective of the litany of things we might do?

Mr. BAYLESS. I agree.

Senator DOMENICI. Should the Fuel Use Act, should it be repealed, along with increased pricing?

Mr. GREER. Definitely.

Senator DOMENICI. Do you agree with that?

Mr. BAYLESS. Yes.

Senator DOMENICI. With reference to the windfall profits tax, should it be repealed; and if so, why?

Mr. GREER. Absolutely. It needs to be repealed. It's just another deterrent. And so many complications in the way it has to be administered and handled, understanding it and its depressing effects on the exploration and development of oil, it just must be removed.

Senator DOMENICI. Is the take-or-pay issue one that you would care to address for a moment, or do you want us to pass and take another witness?

Mr. GREER. Well, some of the other producers who have had more direct experience with the take-or-pay issue could—would probably have some, perhaps, more constructive comment. But I would just say that under the present climate where the regulatory authorities have so turned the gas industry around that there's no way that take-or-pay can fit into this system. And we, perhaps, should just take a minute to realize what really a good, practical system that we had in the past. When it was necessary or desirable to move gas from a producing area to a consuming area, as from our area to California, in order to justify the expenditure from the pipeline owner's standpoint, to justify the ultimate and continued given fixed price, or approximately fixed price to the consumer, there had to be some stability; and that stability was fixed and managed to arrive at by the purchaser being able to give contracts with some definiteness to them. And that was particularly balanced and assisted by the take-or-pay concept. That way the pipelines could build their pipelines; the producer could drill his wells; there could be gas go through it; the payments would be made; the consumers would get their gas. And that no longer is possible. Now there is no way that a pipeline purchaser now could build a pipeline to the west coast if it wasn't already in place. They've destroyed that part of our economy.

Senator DOMENICI. Mr. Chairman, I wonder if we might just ask Dave—we didn't ask him when he was up there—if he favors the imposition of an import fee. Is that the most logical first step?

Mr. BAKER. Yes, I think so, Senator. I can't think of any other reliable method to stabilize the prices.

Senator DOMENICI. Fuel Use Act repeal and incremental pricing are beneficial?

Mr. BAKER. Yes, indeed, because I think we have such an enormous opportunity in gas reserves that the more of the gas that we can apply to our economy, then the less dependent we become on imported oil.

Senator DOMENICI. Thank you very much.

Senator BINGAMAN. Thank you very much. Thank you, Al. We appreciate your testimony.

Bill LeMay is our next witness. He's a representative of the Governor, testifying today as director of New Mexico Oil Conservation Division, and has a long history of association with the industry. Where is Bill? Bill also joined us at the hearing in Hobbs and gave testimony there. We appreciate you coming up here as well as.

STATEMENT OF WILLIAM J. LeMAY, DIRECTOR, NEW MEXICO OIL CONSERVATION DIVISION

Mr. LEMAY. I thank you for the opportunity to be here. And, Senator Domenici, I also appreciate you being here. The natural gas business has entered uncharted water since the adverse effect of FERC Orders 436 and 341. Competition is fierce and casualties are higher and the outcome is uncertain. Here in the San Juan Basin we have witnessed a 38-percent decline in gas production this past year. There has been negligible drilling with the resultant loss of gas reserves and an evolving market which only recognizes price, not long-term supply. And I might mention what Bob Bayless said is true. For many months here we've had zero rig activity but now I understand there is one rig operating and that is 100 percent of the activity and that rig is Bob Bayless'. It must be an expiring lease or we wouldn't even have that one rig operating.

Senator DOMENICI. That's a 100-percent increase, however.

Mr. LEMAY. It's a 100-percent increase. It is important to note that explorationists do not drill wells for spot market prices. A certain number of prospects will be drilled based upon defined prices and takes. These factors can be cranked into an economic analysis and a decision be made. In other words, long-term contracts—I define that as over two years—will get wells drilled. The higher the price, the higher the takes, the more wells—the higher that price and the higher the takes, the more wells that will be drilled. Today spot market price mainly represents a distressed sale by producers who must generate immediate cash flow to satisfy pressing internal needs. Producers do not drill and replace spot market reserves.

Consumers must understand that cheap gas prices enjoyed today will only hasten future shortages in which spot market gas will be the most expensive gas available. California is our only viable market for San Juan Basin gas. We do not mind competing, but we deserve a level playing field. The recent FERC decision which addresses true commodity cost between Canadian and American gas is a step in the right direction.

We are not afraid of competition, but want the rules of the game to be fair. Whenever PG&E signs contracts with itself to buy Canadian gas for its own consumers and Southern California Gas is afraid to sign a long-term contract with gas producers because the California Public Utilities Commission might, in hindsight, say that Southern California was imprudent, therefore, I believe we do not have a level playing field. When the San Juan Basin has become a free gas storage reservoir for California because of the FERC abandonment policies, we do not have a level playing field.

The State of New Mexico has a vital interest in natural gas production, exploration, and marketing. We feel that the long-term interests of producers and consumers alike are best served by a policy which encourages a return to higher percentages of contract gas, especially for core market customers. Those customers do not have the ability to switch fuels. FERC policies which provide for abandonment—if California does not want our NGA gas, turn it loose so that we can sell it elsewhere.

The development of new markets for New Mexico gas and transportation capacity to reach those markets, to make available the transmission capacity on a nondiscriminatory basis so that producers can compete fairly in the marketplace, to recognize that a reliance on Canadian supplies of gas is not in our country's best interests—Canada is a foreign country subject to the laws and policies of the party in power. Consumers need look back only two years to see what prices they were paying for Canadian gas as compared to U.S. gas. Our natural gas industry is going through a scary, unsettling time.

We believe that policies which support true, nondiscriminatory competition and which at the same time address the long-term supply needs of our Nation, are in the best interests of consumers and producers alike and, therefore, they serve the best interests of our country. Thank you.

[The prepared statement of Mr. LeMay follows:]

TESTIMONY BEFORE THE SENATE ENERGY COMMITTEE

BY WILLIAM J. LEMAY
DIRECTOR, NEW MEXICO OIL CONSERVATION DIVISION

MARCH 2, 1987

PREFACE - This presentation is concerned with how the current oil and gas industry problems are effecting one specific part of the country.

BACKGROUND - The San Juan Basin is a mostly gas producing province, with oil comprising only 20% of the total value of production.

Gas production was discovered in the San Juan Basin in 1924 and oil production in 1927. There are presently over 20,000 wells in the San Juan Basin in both Colorado and New Mexico.

The San Juan Basin is not a complex geological area, but the nature of the production from "tight" sandstone formations makes getting the oil and gas out tough work.

The San Juan Basin has been a surprising area over the years because as the demand for gas grew, the drilling increased and more and more gas was developed. In 1957 one of the prominent San Juan Basin geologists wrote that the San Juan Basin would be depleted in twenty years; it has now been thirty years since that man made that remark, and now the San Juan Basin is facing a severe problem.

PROBLEM - The market for San Juan Basin gas has been limited to about 30% in state use, with the majority going to Southern California. This past year pressure from imported gas and changes in marketing methods have greatly reduced the price of gas to a point where it is no longer possible for many operators to replace their gas reserves. Consequently, drilling activity is at an all time low. For the first time in over 30 years, there have been days when no drilling rig was "making hole" in the San Juan Basin.

Chart #1 shows the level of activity in the San Juan Basin since 1970. The 1986 activity of approximately 400 well completions reflects some holdover activity from 1985, and since 1986 has no holdover, the 1987 figures will be lower.

Chart #2 shows the production of San Juan Basin gas since 1970. The dramatic decrease in production to 50%-60% of prior levels shows the previous mentioned effects.

Chart #3 shows the effect of the discovery and development of two significant oil fields in the San Juan Basin over the last few years. It would be a sign of hope, except that the value of the oil has dropped.

Chart #4 shows the value of San Juan Basin oil and gas production. Although the value of oil production increased, its value has dropped by 40%. Combined with the drop in gas price and volume, the economy of the San Juan Basin lost 45% from oil and gas production and is slated to lose even more in 1987.

Chart #5 shows how the average price of crude oil has dropped in the San Juan Basin.

Chart #6 is the real important chart. It shows how gas reserves have changed with time from 1977, and projects the status of reserves of gas in 1996 at current production and replacement rates!

FUTURE - In 1984 the Interstate oil Compact Commission released a study which concluded in part "An alarming outgrowth of this study is the realization that the ability to deliver natural gas may be declining. . .should this decline be common throughout the United States, it presents a serious picture during times of peak consumer demand. A reduction in the ability to call upon production capability when needed, supplemented by withdrawals from storage, could have a severe impact upon meeting essential human needs, even after interruptions in service to other customers. The surplus production capability of natural gas, while appearing to be extensive on a daily average throughout the country, is a necessity to meet needs during critical days of peak demand."

The February 23, 1987 Oil and Gas Journal contains an article by the executive vice-president of Tenneco, Inc., wherein he cites the possibility of localized gas shortages in the United States next winter. How is this reflected in the San Juan Basin?

For the past two winters, the State Oil Conservation Division Director has had to issue a memorandum suspending portions of our rules which protect correlative rights, in order to allow wells to produce to meet local and out-of-state demand.

Unfortunately, natural gas prices are not now reflecting replacement costs. On the market it is being treated as a quickly replaceable commodity with very elastic supply and demand curves.

Those who understand supply and demand economics can see what is coming down the road: a time when the demand for gas will be so close to the supply that the incremental cost will drive consumers to wonder what the Oil and Gas Industry is up to; a time when there will not be enough skilled workers, to man not enough workable rigs, to drill not enough feasible locations to produce the gas needed. Where will you be then, having hearings with consumer groups about gas prices and shortages?

The Oil and Gas Industry has not had a time worse than this, but it will survive. The Oil and Gas Industry welcomes the chance to compete in a free market economy, but please don't change the rules when times get better!

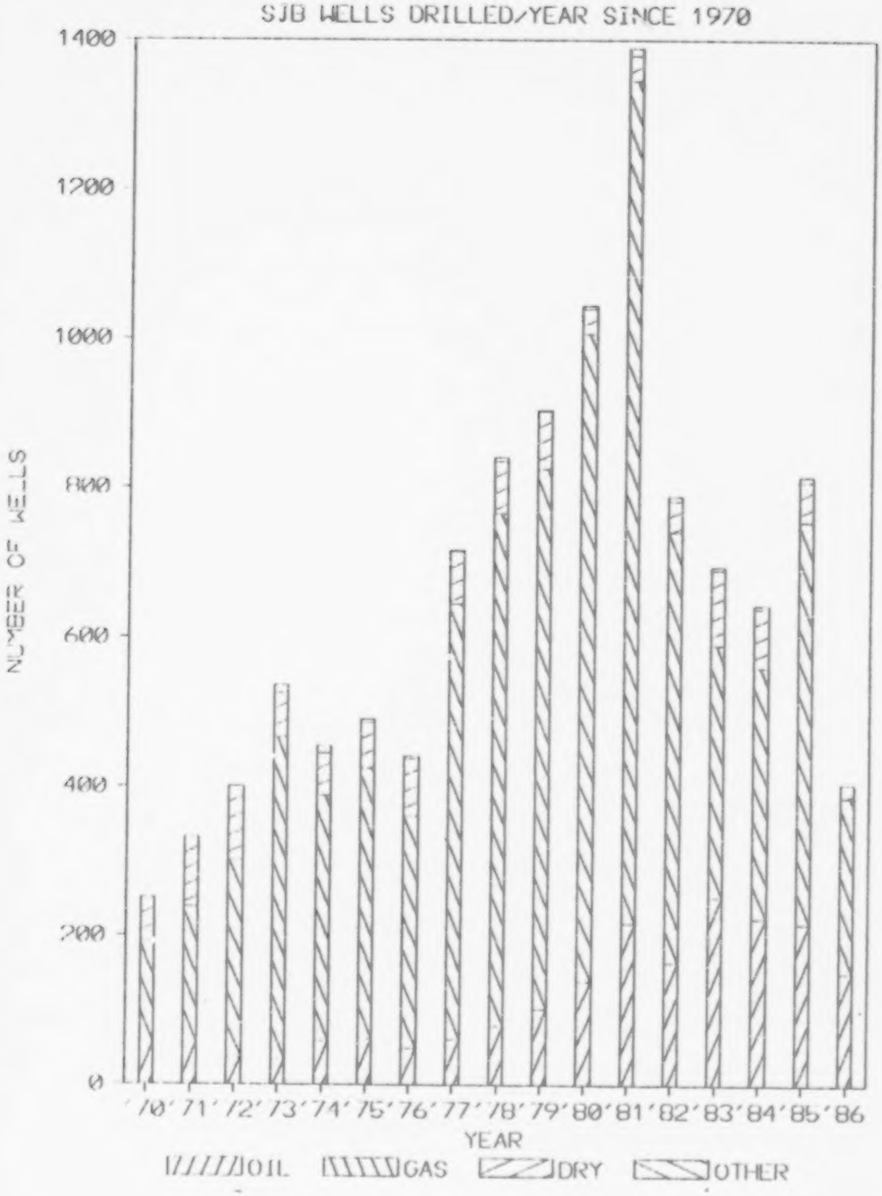

SJB WELLS DRILLED/YEAR SINCE 1970
1400
1200
1000
800
600
400
200
0
NUMBER OF WELLS
'70
'71
'72
'73
'74
'75
'76
'77
'78
'79
'80
'81
'82
'83
'84
'85
'86
YEAR
OIL
GAS
DRY
OTHER

CHART #1

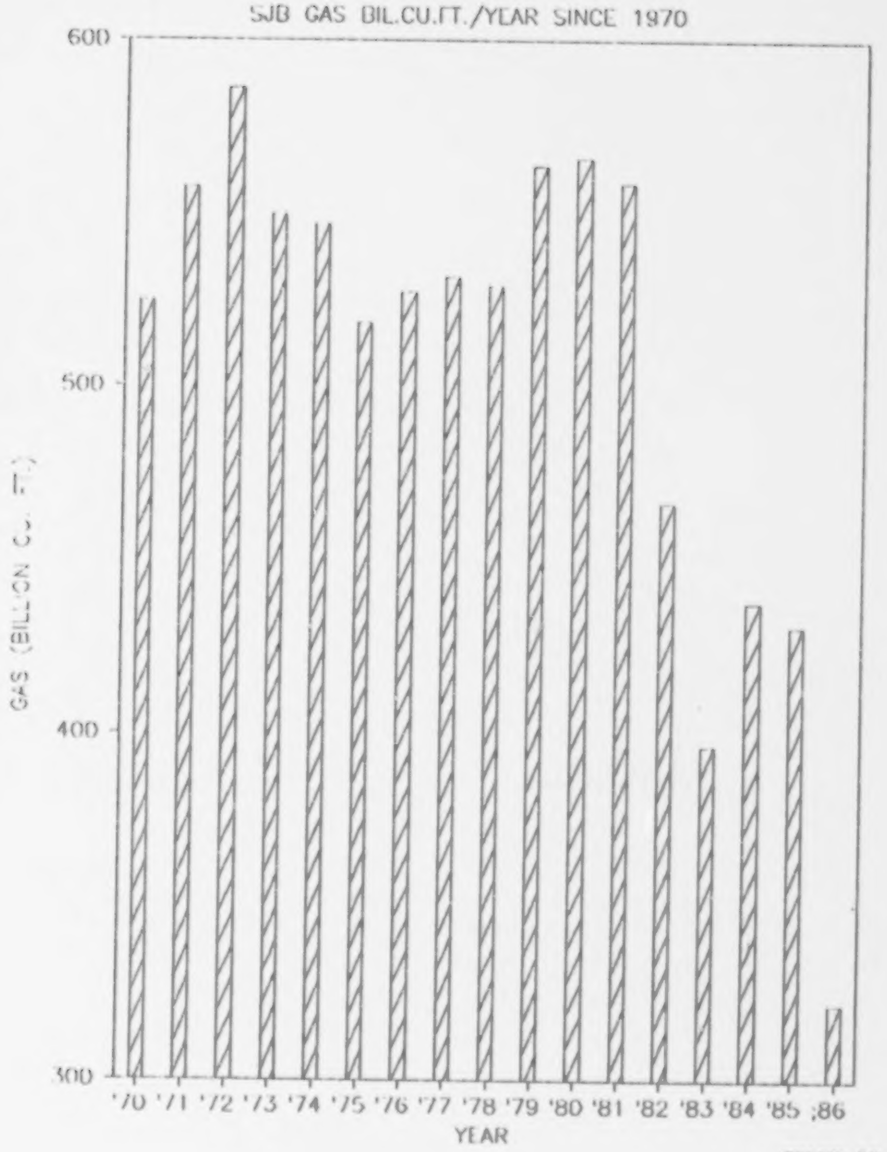

SJB GAS BIL.CU.FT./YEAR SINCE 1970
600
500
400
300
GAS (BILLION CU. FT.)
'70
'71
'72
'73
'74
'75
'76
'77
'78
'79
'80
'81
'82
'83
'84
'85
;86
YEAR

CHART #2

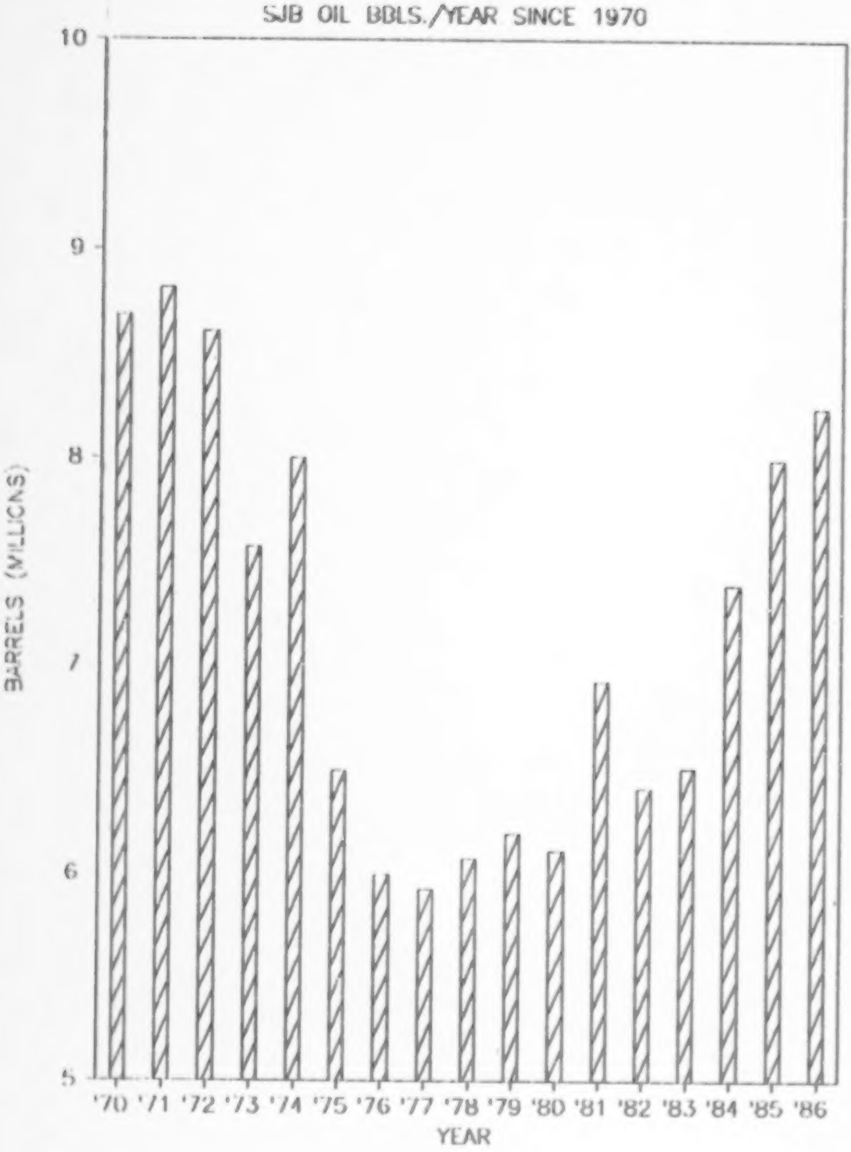

SJB OIL BBLS./YEAR SINCE 1970
BARRELS (MILLIONS)
10
9
8
7
6
5
'70
'71
'72
'73
'74
'75
'76
'77
'78
'79
'80
'81
'82
'83
'84
'85
'86
YEAR

CHART #3

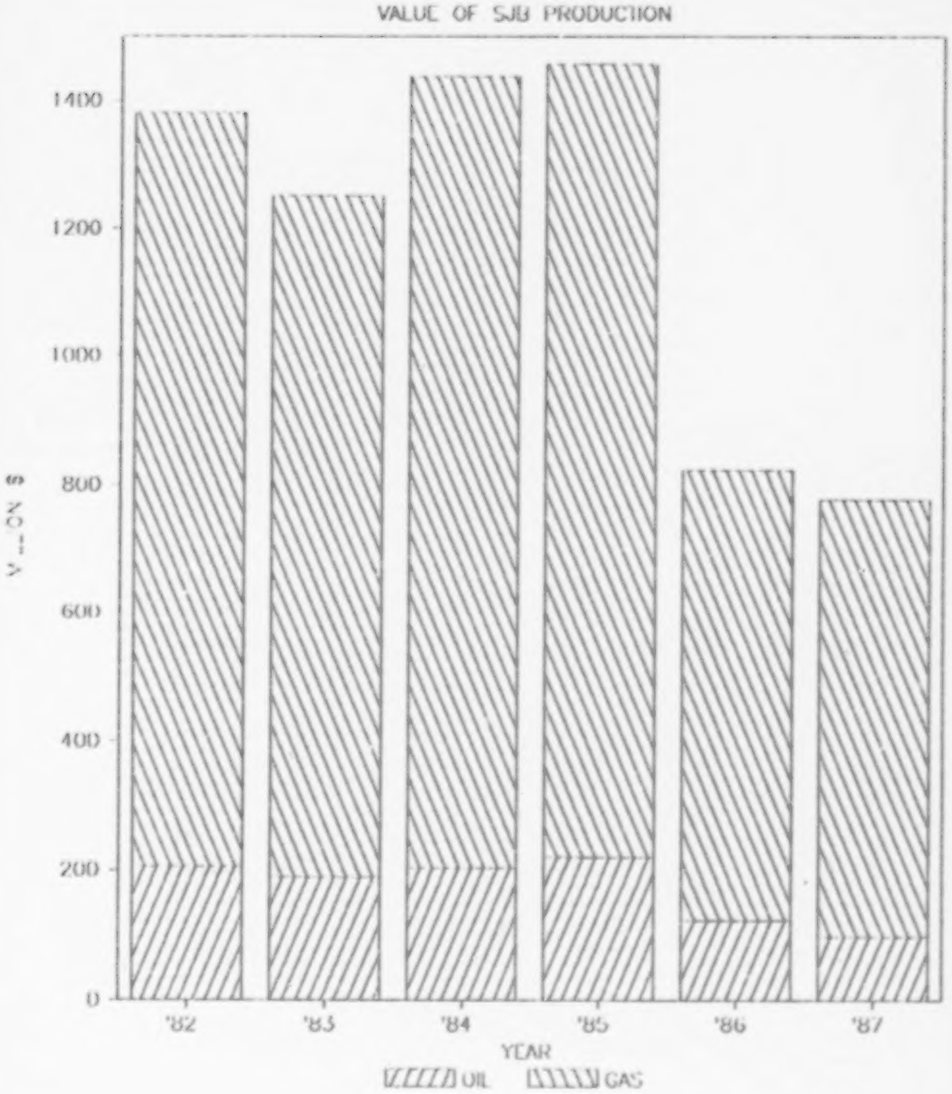

VALUE OF SJB PRODUCTION
V…ON $
1400
1200
1000
800
600
400
200
0
'82
'83
'84
'85
'86
'87
YEAR
OIL
GAS

CHART #4

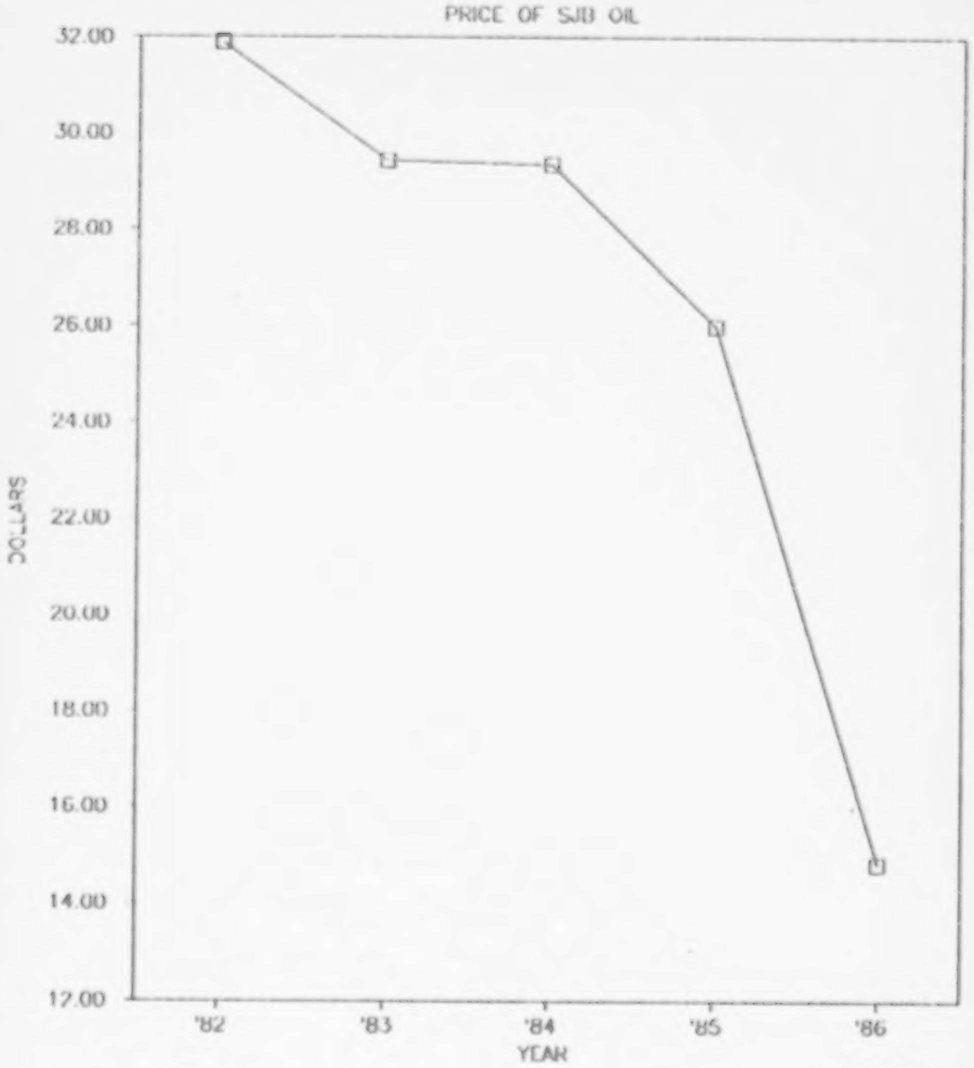

PRICE OF SJB OIL
DOLLARS
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
'82
'83
'84
'85
'86
YEAR

CHART #5

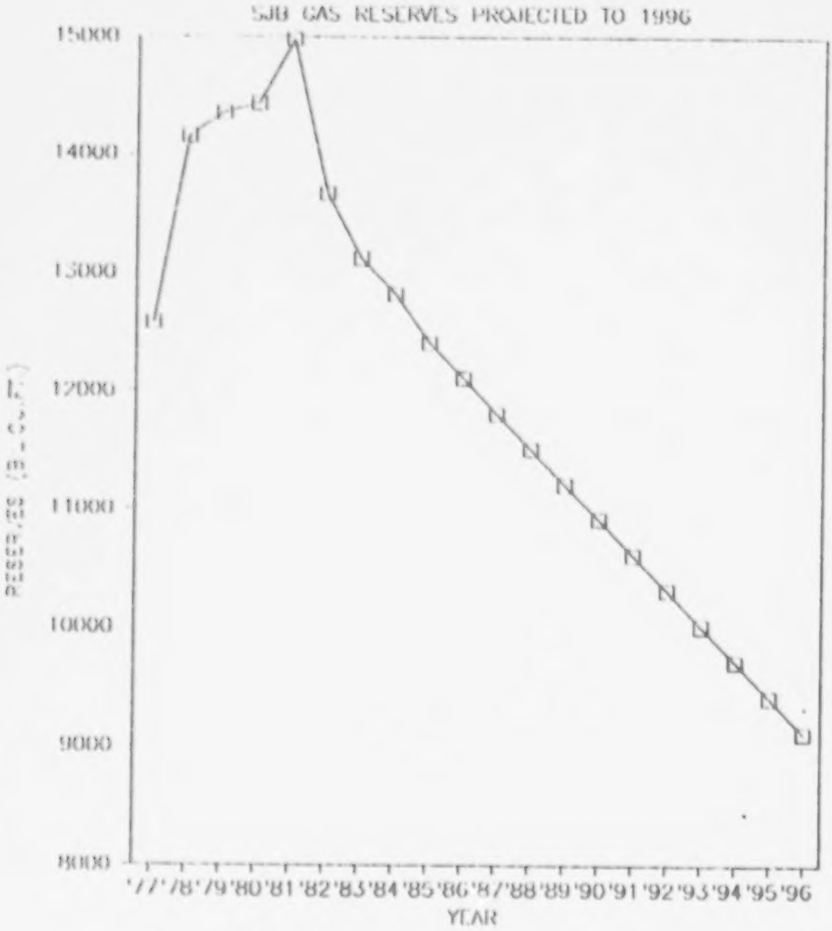

SJB GAS RESERVES PROJECTED TO 1996
15000
14000
13000
12000
11000
10000
9000
8000
Reserves (B.C.F.)
'77
'78
'79
'80
'81
'82
'83
'84
'85
'86
'87
'88
'89
'90
'91
'92
'93
'94
'95
'96
YEAR

CHART #6

U.S. peak day gas shortages possible in winter of 1987-88

Joe B. Foster
Executive vice-president
Tenneco Inc.

Adapted from a speech presented Feb. 11 at a Cambridge Energy Research Associates seminar in Houston.

I have consistently held for a number of years that the U.S. gas bubble, which I have called a "sausage," is going to last longer than most in the industry believe.

I have not recanted.

There is no question that deliverability is dropping. We see it in the production of Tenneco Oil Exploration & Production. We see it in deliverability tests we run on Tennessee Gas Pipeline Co.'s suppliers. We know that an 800-900 rig count will result in falling deliverability.

Some very cold days have come and gone this winter, however, and we have seen no signs of a shortage, even on peak days.

The heat of declining deliverability and falling rig counts is shrinking the sausage, but the sausage is still there.

Peak day shortages. I believe there could be some peak day shortages in the winter of 1987-88. They probably will be on the Gulf Coast, however, and not in the Northeast, where storage is much more available.

If the 1987-88 shortages are serious enough to affect residential and commercial customers, even briefly, the situation could be read as the end of the bubble. It could cause a spurt in prices and stimulate recompletions and gas development drilling, including infill drilling and development of mothballed discoveries.

The result could well be a quick return to oversupply. There is a lot of undeveloped, untapped gas deliverability sitting on the sidelines, waiting to get in the game "when the bubble bursts." A lot of it may rush in at once.

By the early 1990s, however, there may well be genuine supply shortfalls for gas competing in the No. 6 fuel oil market. Current prices and rig counts are simply not adequate to bring forth the supplies needed.

All of our analyses—we have made tons of them—say that wellhead netbacks have to be about $2/Mcf to elicit even modest reserve additions. We need $3/Mcf to even come close to replacing production with new reserves. We have drawn down our inventory of Lower 48 gas reserves to 160 tcf from 260 tcf since 1970. The surplus has been a result of inventory drawdown, not reserve additions.

Our reserve life index in the Lower 48 could decline to only 7 years of supply by the mid-1990s.

I am skeptical that we can get by with an inventory of much less than 7 years. That means reserve replacement has to begin in the early 1990s. Wellhead prices simply have to come up for that to happen.

Wellhead prices. I suspect that, on a seasonal basis, we will see that bottoms were reached during the last half of 1986 and the first half of 1987. I certainly hope so. This is a very tough market to figure out. There are so many extraneous forces.

Availability of limited term abandonment gas, a phenomenon permitted by the Federal Energy Regulatory Commission, creates new supply on the spot market. So does each newly opened pipeline. Contract renegotiations bring on apparent new supply. All of this puts downward pressure on prices, yet no real supply is created. In fact, of course, real supply is declining. There are wide disparities in the market.

Tenngasco, for example, has been supply limited in recent weeks and has been unable to serve all its markets. Yet Tennessee has continued to have large volumes of shut-in gas because the market price is not high enough. The supply is there but not available at the price being offered.

The market is struggling to find balance, and it is simply not there yet.

Sooner or later, by 1988 or 1989, I hope, gas to gas competition will have abated and gas will trade at the burnertip on the basis of No. 6 fuel oil.

The price path of gas from there on will be greatly affected by the path of oil prices. Low oil prices would mean low wellhead netbacks for gas and less gas supply, causing gas prices to move up, trading against No. 2 oil more quickly.

Higher oil prices and consequent higher wellhead netbacks could bring forth more supplies and delay the time when gas is priced against No. 2 oil.

In either event, I don't expect the people who really need gas to be short of it during this century.

Foster

Residential and commercial users and those who need gas for environmental reasons or premium uses are going to have gas.

Actions needed. There are six actions I believe will have to occur as this industry makes its transition to an orderly gas market.

- We must achieve market sensitive supply contracts between producers and pipelines for old contracts as well as new ones.
- The movement toward open access pipelines must continue.
- If we are to have the kind of competitive market driven gas industry so earnestly sought by the reformers, it is essential that gas not be legislated out of any market.
- There must be a resolution of the take or pay problem. FERC must recognize that there is a problem, that it played a major role in causing it, and it must play a key role in resolving it.
- There must be compensation for standby services and for the supply aggregation function. If local distribution companies (LDCs) and end users want security of supply for the longer term or a backup source for the short term, they should be willing to pay for it. At the producer level, when a pipeline asks a producer to leave part of his gas shut in to make the reserves last longer, it should pay an inventory carrying charge.
- An orderly gas market also must have more enlightened state regulation of LDCs. Can LDC efficiencies be improved? Can costs be cut? Can loads be better managed? These questions need to be examined for, clearly, to have a secure and orderly gas market, distribution costs cannot be excessive. ▪

Natural Gas Deliverability Study

Final Report

Interstate Oil
Compact Commission

NATURAL GAS DELIVERABILITY STUDY

Final Report

INTRODUCTION

The winter of 1983-84 produced some of the coldest temperatures on record in many parts of the United States. Shortage conditions which existed in producing states such as Texas and Oklahoma led many concerned persons to ask whether the natural gas producing and transmission industries could supply all the gas needed on peak days or brief periods of peak demand. Additionally, the question has been raised whether such peak demands could cause interruptions in gas service to various segments of society, especially essential human needs.

BACKGROUND

Until the 1920's, natural gas remained a state or regional commodity; its customers being cities served by pipelines from the nearest field. The development of major gas fields made possible the export of huge volumes of natural gas to other markets in the region and across the country. The first long-distance interstate pipeline was completed in 1931, and transported gas from the Texas Panhandle to Chicago, a distance of one thousand miles. Increased demand for natural gas, as well as reductions in supply and demand for other fuels such as artificial gas, fuel oil, and coal before and during World War II spurred the construction of other large interstate pipelines from the producing fields in the Southwest to rapidly expanding markets in the upper Midwest and the Northeast.

In order to understand how such interruptions in service to customers could occur during periods of peak demand, one must examine the production levels of natural gas in this country as well as the volatility in demand for certain classes of customers. Total dry gas production in the United States from July 1983 to June 1984 began at 1.285 TCF in July, peaked at 1.629 TCF in January, and fell to 1.374 TCF by June. (See Chart 1.) However, consumption doubled from the summer to the peak winter months, and withdrawals from storage rose in January to nearly twenty-five times its July level. A large portion of the excess production over consumption during the spring and summer months is injected into storage for future use to meet demands over production. The seasonal variations for production from a major gas field can be found in Chart 2, which shows production from the Hugoton Field in Kansas from July 1982 to June 1984.

Total dry gas production dropped 26% from 1973 to 1983, and rose to 80% of the 1973 level in 1984 primarily due to greater consumption during the winter months. Much of this drop can be attributed to declines in industrial consumption of natural gas, which fell 35% from 1973 to 1983 (See Chart 3). This decline can be attributed to increases in prices which led to greater conservation and fuel switching, and most recently due to the effects of a severe recession.

The residential and commercial markets have not experienced nearly so steep a drop in demand since 1973, and these markets are much more susceptible to changes in weather conditions (see Chart 4). From July 1983 until January 1984, residential consumption rose 700% and commercial rose 300%. During that same period, industrial consumption rose only 55%, and utility consumption, which peaks during the summer months, declined by 30%.

Since 1973, the weather sensitive residential and commercial markets have risen in their percentage share of natural gas consumption, from 37.7% of the consumer delivered market for 1973 to 44.3% in 1983. However, during December 1983, when demand was heaviest, their share of consumption rose to 60%. The cushion provided by the large industrial market to be utilized for relief of the residential/commercial market through curtailment of service has been shrinking. Such shrinkage increases the possibility that shortages to the residential customer may occur should sustained cold periods place an undue demand on the ability of the pipelines to deliver natural gas.

A perception which is often present in discussions of natural gas and is certain to be mentioned when considering available supply for consumers is the "gas bubble" in which the supply of natural gas is believed to be well in excess of the demand. A recent American Gas Association analysis indicates that the unused production capability in the United States will be 2.9 TCF, or 7.945 BCF/D, in 1985. If potential Canadian and Mexican natural gas imports are taken into account, AGA believes total untaken supply could rise to 4.2 TCF, or 11.507 BCF/D. Based upon these figures, it appears that the United States is amply supplied with natural gas on a daily average. It must be remembered, however, that the demand for natural gas is volatile and sensitive to external conditions. The severity of weather obviously has a major impact, especially in the consumption of gas for home heating purposes. This study is focused on the nation's capacity to supply gas at the time when the market is in its most critical state -- during the cold winter months, when demand for residential purposes is at its peak.

A suggestion of the volatility of demand and the testing of the ability to deliver natural gas to customers in Texas in December, 1983, was depicted recently in a booklet published by the Texas Railroad Commission, "Nine Days on the Brink." While well test reports filed with the Commission indicated a potential deliverability of 24 BCF per day, in fact Texas was unable to deliver more than 13.5 BCF/D. From the 19th to the 28th of that month, Texas suffered under one of its most severe winters ever. It was able to meet demand only by withdrawing in excess of 3 BCF/D from storage reservoirs across the state. Fortunately, the cold spell fell over a holiday period, when schools and many businesses were closed; thus essential human needs were able to be met. Had the cold weather continued, the Railroad Commission says, it is possible that some pipelines would have become inoperable due to pressure drops, and some storage reservoirs may have exhausted their usable storage capacity. The situation is more dramatic because it occurred in the largest onshore natural gas producing state in the country.

THE IOCC STUDY

At the midyear meeting of the Interstate Oil Compact Commission in June, 1984, the Commission ordered a study to determine the capacity of gas producers and pipelines to make gas available during peak demands. The motion reads as follows:

> "The Commission shall authorize its Chairman, in consultation with the Executive Director, to appoint a committee to design and conduct, by such means as may be appropriate and economically feasible, a study with respect to the interrelationships between gas reserves in the United States, well deliverability, and physical deliverability of gas through the gas gathering, pipeline transmission, and distribution systems of the nation. The intent of this study is to deal, insofar as it is practicable, with the existence or not of a gas surplus in the United States and to determine the capacity of the gas producing and gas pipeline segments of the oil and gas industry to make gas available during periods of peak demand. The committee to be appointed is further charged with examining the impact of its findings on existing state and federal regulatory regimes. The committee

to be appointed is directed to report at the earliest possible time to render interim report to each meeting between the time of its appointment and its final report."

The Chairman of the Interstate Oil Compact Commission, Governor Toney Anaya of New Mexico, named the following persons to the committee:

Herbert W. Thompson, Louisiana (chairman)
Hamp Baker, Oklahoma
Michael Lennen, Kansas
William J. Murray, Jr., Texas
J. Kearney Shanahan, Ohio

At all stages of the committee's work, it relied on the assistance and counsel of George W. Hardy, III, official representative to the IOCC from Louisiana, and Richard C. Byrd of Kansas, general counsel to the IOCC.

METHODOLOGY

The committee developed a methodology to determine the capability of natural gas to be supplied during a peak period It believes that the amount can be determined by: 1) Establishing the maximum amount of natural gas produced during periods in the last seven years when the combined systems were operating at or near capacity. This provides the maximum capacity of the gathering and pipeline system to deliver whatever gas is available; and 2) Determine the amount of supply in the system during the selected peak period. This, in turn, tells the maximum amount of gas available to go into the system. The committee requested information on unconnected wells and their estimated capacity, and the capacity of wells which were frozen in, to determine the significance of such unavailable supplies when compared to the total capacity to produce. Additionally, curtailment volumes were requested to determine what customers were unable to be supplied during peak periods in the last seven years.

For purposes of the study, the United States was divided into the following areas: California; Kansas; Oklahoma-Arkansas; Louisiana; Texas; Rocky Mountain States; New Mexico; Northeast-Midwest States; and the Outer Continental Shelf controlled by the Minerals Management Service.

In order to obtain as accurate information as possible, the committee asked those compiling the figures to request the information directly from the pipelines. The committee's interest was in actual production numbers, not well tests or allowables. Certain exceptions were permitted, in order to determine the capacity of unconnected wells and the wide open capability of the Outer Continental Shelf gas fields. An example of why such a distinction is necessary: the G-10 forms supplied to the Texas Railroad Commission to show production potential for each gas well, when compiled, theoretically gave Texas a capacity of 24 BCF/D, when in fact the Texas gas fields produced under 14 BCF/D during the coldest days of the previous winter. The G-10 tests are tests utilized to determine the production allowables by the Texas Railroad Commission, and are required to be taken for seventy-two hours under "normal operating conditions." However, pressures may be greater during periods of peak demand than during the time frame when the operator chooses to conduct the test. Other major producing states, e.g. Kansas and Oklahoma, use similar tests into the atmosphere, creating even more unrealistic numbers. While some confusion exists as to the actual meaning of the test, it cannot be used to determine the maximum production capability of any well. According to a study compiled by William J. Murray, Jr., and presented at the IOCC meeting in June, 1984, Texas has not been able to supply more than 18 BCF per day since 1977, the beginning date for the IOCC data request.

In requesting information, the committee sought production from state sources, including wellhead production, production from storage, and other (gathering line, gasoline plant) production. Exchange and other pipeline purchased information was not requested, in order to eliminate duplication. The full text of the questionnaire is included as an appendix to the study report. A synopsis of the questions follows:

1. Largest monthly volume for each calendar year since 1977.
2. Volume delivered during the 30-day period from December 15, 1983 to January 14, 1984.
3. Monthly production for November and December, 1983, and January and February, 1984.
4. Total volume sales of both summer and winter peaks from 1977 for one, three, or five day periods retained by the pipeline company.
5. Number of wells shut-in or not producing at full capacity during December 1983 and January 1984 and production potential of these wells.
6. Were high demand days previously identified days in which 100% of the available components of supply was fed into the system.
7. Were the high demand days previously identified days in which 100% of the delivery system was utilized at full capacity.
8. Curtailments experienced, and class and percentage of total sales, if available.
9. Storage capacity to supplement peak demand, if available.

Information was requested from 1977 to date in order to determine the maximum capacity of the gathering and pipeline systems. The study, however, is limited to the deliverty capacity during the winter of 1983 and 1984; the delivery capacity including storage withdrawal.

RESULTS AND CONCLUSIONS

The results of the study indicate a production capability in the continental United States of 50.961 BCF/D. According to the Energy Information Administration, the average daily production during January 1984 in the United States, excluding Alaska, was 52.048 BCF. The study number is more conservative than the EIA daily average or the actual peak day production, due to variances in the pipeline responses. Many companies were unable to provide peak day information, and their production was counted as a daily average of a peak month, rather than an actual peak day. Production information for Louisiana, the Outer Continental Shelf, New Mexico, the Rocky Mountain States, California, the Northeast-Midwest, and "other" states are daily averages of peak monthly production during the 1983-84 winter. In some cases, peak day figures were unavailable; in others the information received was not complete enough to accurately determine actual peak day capacity.

During the peak days of 1983-84, 1.198 BCF/D was available as surplus. Most of this surplus was found in Louisiana, the Outer Continental Shelf, and New Mexico; smaller amounts were found in Oklahoma, Kansas, and the Rocky Mountain States.

During this winter period, a number of pipelines in the Mid-Continent region of Texas, Oklahoma, Kansas, and Louisiana reported that production amounting to 1.7 BCF/D was not deliverable because the weather had rendered a number of wells inoperable. These are referred to as wells that are "frozen off." The amount frozen off during any winter would be dependent upon the severity of the weather and its effect upon natural gas wells and gathering systems; during a mild winter, this amount could be minimal. However, during a severe winter crisis, it must be understood that an amount of natural gas may be undeliverable and correction of the problem might take several days. Thus, the greater the need, the more likely this problem will occur and a necessary amount of natural gas depended upon will not be available.

Just over 4,000 wells were reported as unconnected to pipelines, or shut in, during the period of the study. Nearly 1,200 of these wells were reported in Louisiana and states west of the Mississippi River, the largest producing area in the country; this is a normal figure due to time required to connect a well to the pipelines after completion. However, 2,884 wells were reported as unconnected in the Northeast-Midwest region, and this figure requires some explanation. While some of these wells were unable to produce during this period due to inability to compete against the pipeline pressure, the vast majority are wells which are unconnected due to market conditions. These are marginal producers, drilled and completed during periods of higher average natural gas demand. A large portion were not dedicated to a particular pipeline; when demand decreased, the pipeline companies chose to take first from those wells which were dedicated. It is unlikely that many of these wells, with a combined production of just over 100 MMCF/D, could be connected to pipelines for use during a period of sudden and unexpected peak demand.

Table 1 and Chart 5 illustrate the peak day production, storage withdrawal, frozen off and shut-in production, and surplus for the producing areas of the United States. Chart 6 shows these categories as percentages of the total potential deliverability.

While it is known that both Texas and New Mexico experienced curtailments during the winter of 1983-84, no figures are available in which to quantify the amount and class. Oklahoma experienced curtailments of .054 BCF for one company in the industrial class during a five-day period; Arkansas a .002 BCF for a one-day period. Kansas companies experienced curtailments of .308 BCF per month, or an average of .010 BCF/D, during the winter of 1983-84. While the information available indicates that curtailments have dropped sharply since 1977, this may not be indicative of the true picture. Customers with shut-off provisions in natural gas contracts are not considered as curtailments, and service interruptions to these customers during periods of peak demand are not included as curtailments in service. The IOCC is aware that some curtailments have occurred during the 1984-85 winter period, but their extent is not known.

What is most significant about the figures which have been obtained is the tremendous difference between the average daily consumption figure and the peak potential reached during a severe winter. In 1983, total consumption was 16.835 TCF, or 46.12 BCF/D; consumption in 1984 totaled 17.485 TCF, or an average of 47.91 BCF/D. This average consumption contrasts dramatically with the consumption of 73.015 BCF/D (50.961 production, 22.054 storage) for a peak day demand during the winter of 1983-84. Further, a potentially significant amount cannot be counted upon during severe weather, as wellhead and gathering line condition (frozen off wells) could prevent this from ever being delivered.

While the figures shown in Table 1 are an indication of the capability of production during the period studied, none of the states believe that such a rate of production can be sustained over a long period of time. As some of the state figures are obtained from averages, a peak day production would be in excess of 50.961 BCF/D. However, such an increase in production to wide-open capacity would likely eliminate much of the believed surplus.

An alarming outgrowth of this study is the realization that the ability to deliver natural gas may be declining. The study conducted by William J. Murray, Jr. in Texas since 1977 indicates that the estimated maximum capacity in that state has declined from 17.7 BCF/D in 1977 to 13.8 BCF/D in 1984; a drop of 22%. Chart 7 shows the estimated maximum capacity, daily average demand, and shortages during days of peak demand, which were made up by extensive withdrawals from storage and curtailments and interruptions in service to certain classes of customers. The committee believes that this study should be an ongoing project, in order to gather information on a continuing basis to determine if such a trend exists nationwide.

Should this decline be common throughout the United States, it presents a serious picture during times of peak consumer demand. A reduction in the ability to call upon production capability when needed, supplemented by withdrawals from storage, could have a severe impact upon meeting essential human needs, even after interruptions in service to other customers. The surplus production capability of natural gas, while appearing to be extensive on a daily average throughout the country, is a necessity to meet needs during critical days of peak demand.

TABLE I

NATURAL GAS DELIVERABILITY WINTER 1983 - 1984

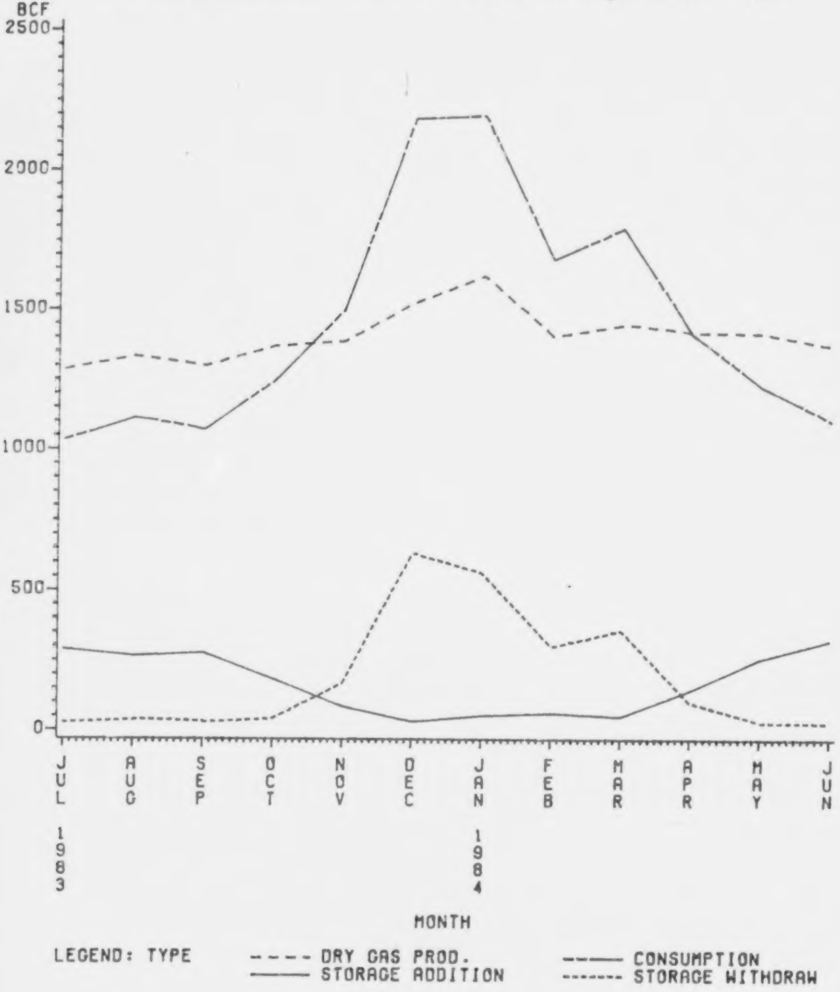
VOLUMES IN BCF PER DAY
14.65 PSIA

State/ Region	Marketed Production	Storage Withdrawal	Prod. Frozen Off	Prod. Shut In	No. of Shut-In Wells	Surplus
Texas	13.529	3.500	.683	.143	743	----
Oklahoma - Arkansas	6.091	1.791	.556	.012	----	.117
Louisiana	5.370[1]	2.647[2]	.280[2]	.130	173[3]	.507[2]
OCS	13.394[1]	----	----	----	----	.228
Kansas	3.069	1.453	.181	----	----	.062
Rocky Mountains[4]	2.528[1]	.143[5]	----	.061[5]	191[5]	.056[5]
California	1.348[1]	----	----	.100	73	----
New Mexico	3.112[1]	.021	----	----	----	.228
Northeast[6] - Midwest	1.620[1]	12.499	----	.109	2,884	----
Other[7]	.900[1]	------	----	----	-----	----
TOTAL	50.961	22.054	1.700	.555	4,064	1.198

1. Daily average of peak month.
2. Companies reporting produced 80% of daily average.
3. Total number unconnected from July 1 - December 31, 1983.
4. Colorado, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming.
5. Companies reporting produced 58% of daily average.
6. Illinois, Indiana, Kentucky, Michigan, New York, Ohio, Pennsylvania, Tennessee and West Virginia.
7. Alabama, Florida, and Mississippi.

Chart 1

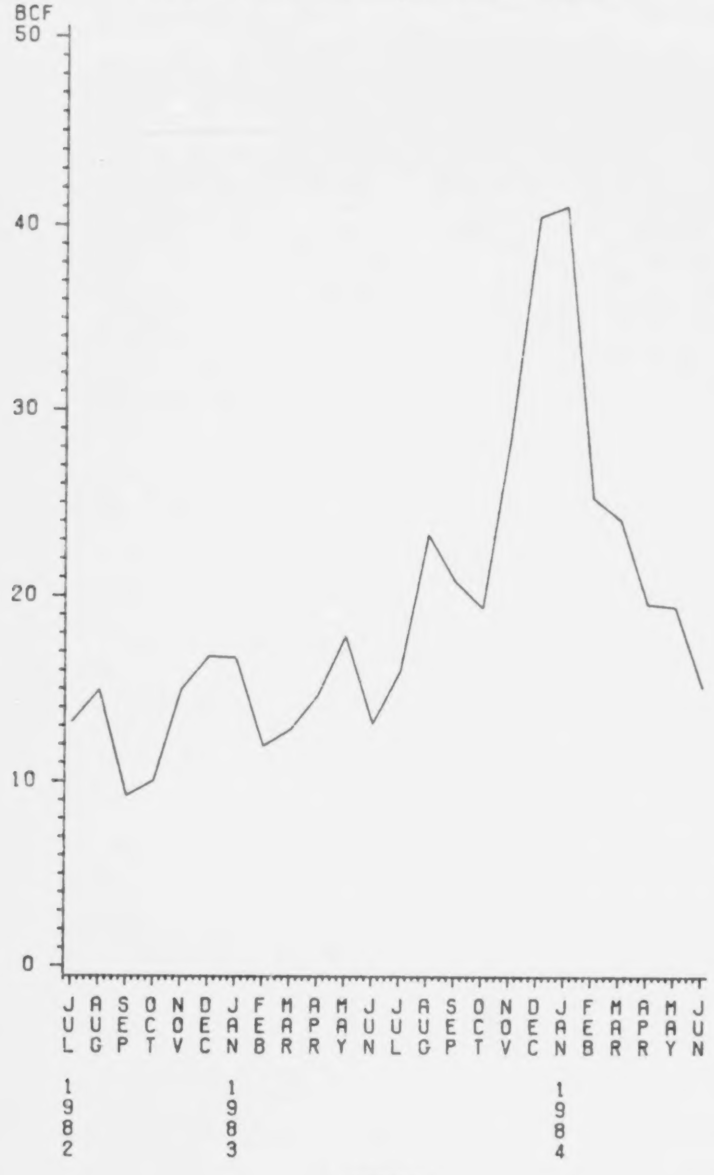
Natural Gas Production, Storage Withdrawals, Storage Additions, and Consumption -- July 1983 through June 1984



SOURCE: Energy Information Administration

Chart 2

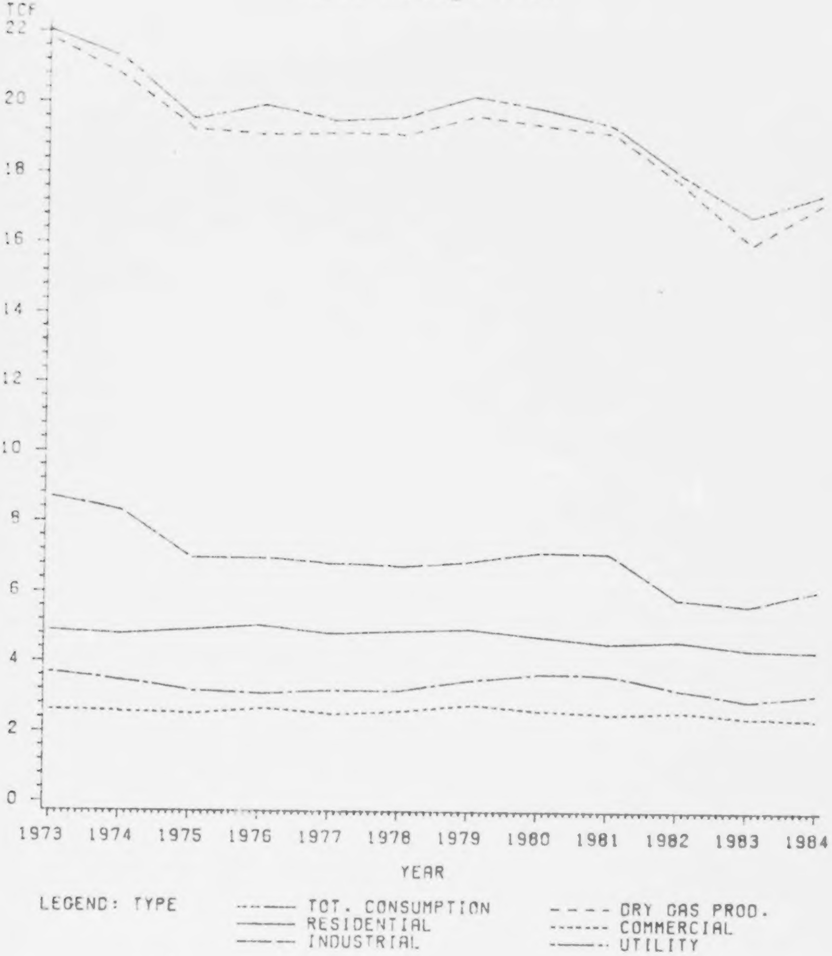
Natural Gas Production -- Hugoton (Kansas) Field
July 1982 through June 1984



SOURCE: Kansas Corporation Commission

Chart 3

Natural Gas Consumption by Customer Class
1973 through 1984

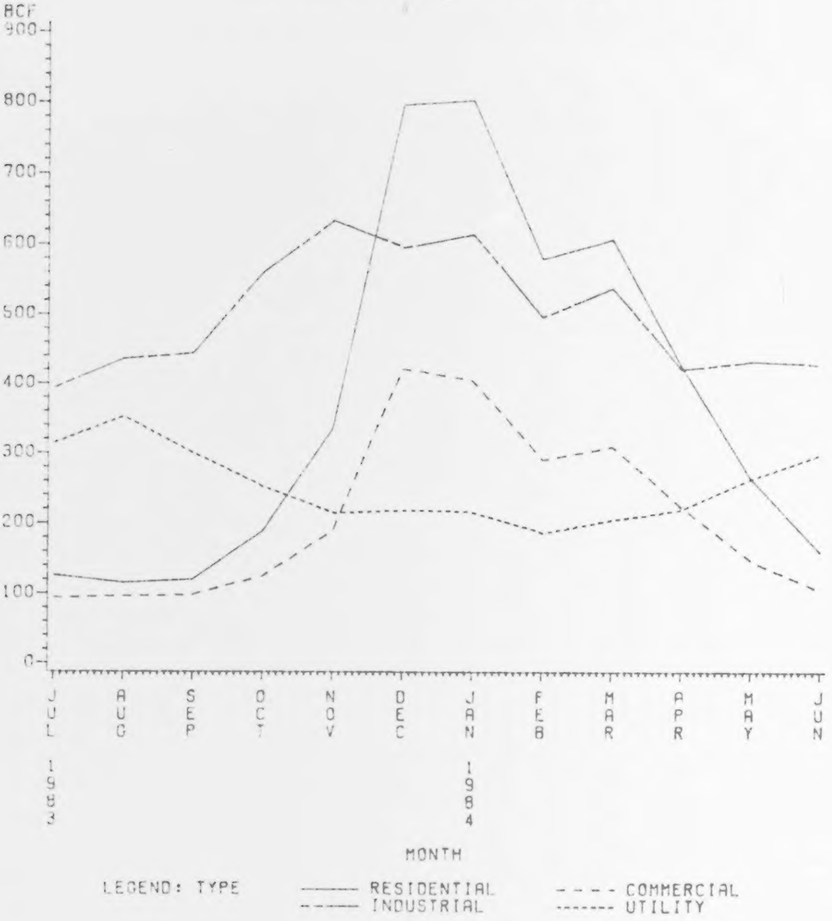


NOTE: Consumption includes imports and withdrawals from storage.

SOURCE: Energy Information Administration

Chart 4

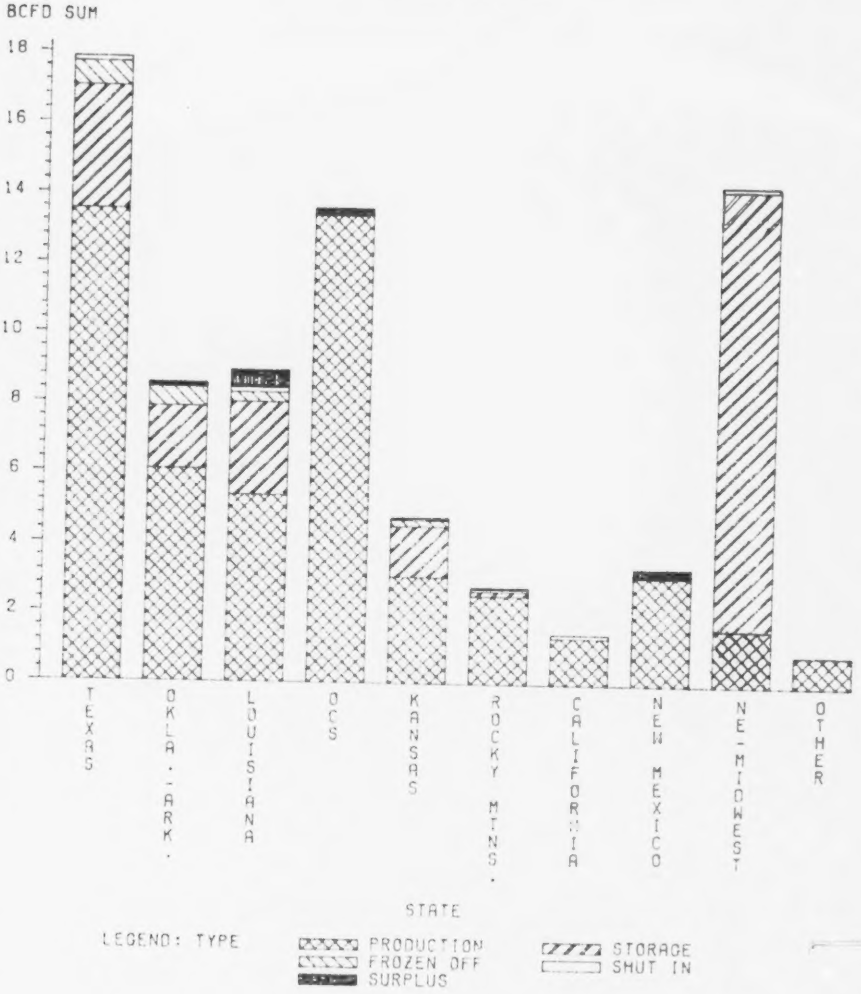
Natural Gas Consumption by Customer Class
July 1983 through June 1984



SOURCE: Energy Information Administration

Chart 5

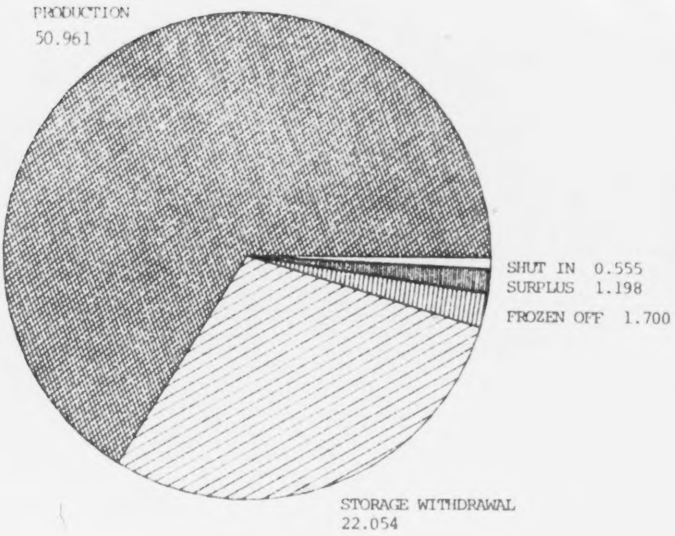
Natural Gas Deliverability -- Winter 1983-1984
BY State/Region



Volumes in Bcf per day

Chart 6

Natural Gas Deliverability
Winter 1983 – 1984

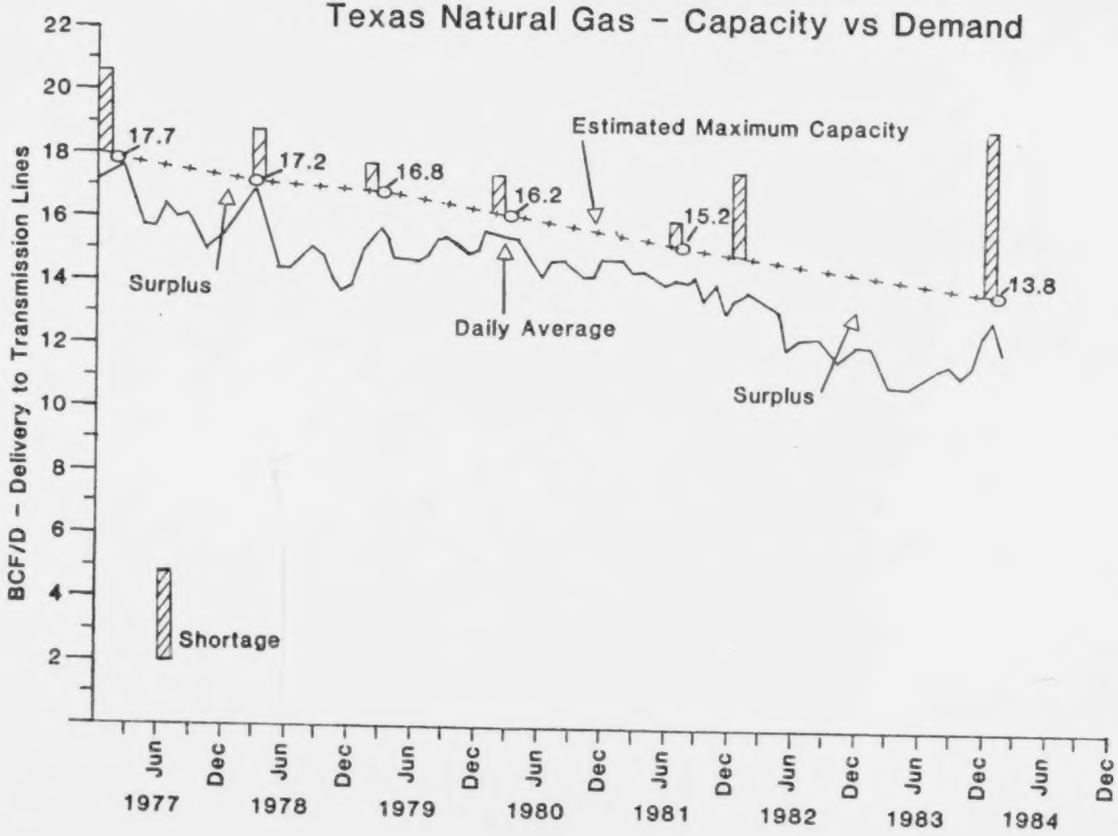


Production:	66.7%
Storage:	28.8%
Frozen Off:	2.2%
Shut In:	0.7%
Surplus:	1.6%

Volumes in Bcf per day

Chart 7

Texas Natural Gas - Capacity vs Demand



Source: Texas Railroad Commission
William J. Murray, Jr.

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TONEY ANAYA
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Executive Director

Guidelines for Uniformity in Determining Peak Demand Capacity of Natural Gas Production on a State-by-State Basis

Background:

Events during the extreme cold weather in the winter of 1983-84 have lead a number of interested and concerned people to question whether there exists a sufficient surplus of production of natural gas to meet the needs of the nation on peak demand days. These concerns were expressed in a motion presented to the governors and official representatives of the Interstate Oil Compact Commission at its Midyear Meeting in June 1984. That action called for a committee to conduct a study to determine the existence, or not, of a gas surplus in the United States and to determine the capacity of the gas producing and gas pipeline segments of the petroleum industry to make natural gas available during periods of peak demand. (A copy of the full motion as it was adopted is enclosed.)

Accordingly, the chairman of the IOCC, Governor Toney Anaya of New Mexico, has named a committee and charged it with the responsibility of conducting the study. A roster of the committee, chaired by Commissioner Herbert W. Thompson of Louisiana, is enclosed for your information. The committee held its organizational meeting in Dallas on August 2nd and established definitions and a methodology, as well as a timetable. These are set out below for your guidance in assisting the committee with this important study.

All of us are aware that delivering a cubic foot of gas from a reservoir in, say, the southwestern part of the United States to a home in Pittsburgh is dependent upon a number of factors, events and accidents. The well must be drilled and completed; distribution line and processing facilities must be in place; there must be sufficient pressure for gas to enter the pipeline, and the pipeline must have the capacity to deliver the gas to the city gate plus the further responsibility of the distribution system to deliver the gas to the residents. The average quantity of gas which was delivered, that is to say consumed, ranged in the last year, from 1,004 billion cubic feet in the month of June 1983, to 2,201 billion cubic feet in January 1984. The question which the committee hopes to answer is: Can the natural gas producing and transmission industries

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reasonably be expected to supply all of the gas needed on any peak day, or brief periods of peak demand? Alternatively would such peak demand cause interruptions, shortages and privation to large segments of the American public. The committee believes that this can be determined by establishing the maximum amount of natural gas produced during the periods in the last seven years when the combined systems were operating at or near capacity. For an example of the type of material the committee is seeking, please note the charts and supporting material contained in the paper presented by Mr. William J. Murray of Austin, Texas, before the Regulatory Practices Committee of the Interstate Oil Compact Commission entitled "Forever Blowing Bubbles." (Paper enclosed.)

Definitions:

For the purpose of this study three definitions appear to be necessary beyond those that are usually used. They are:

> "Demand capacity" - the ability of the gas delivery system to meet the total demand for natural gas from available firm supply.
>
> "Gas delivery system" - the physical system from wellhead to burner tip in place and functioning in the real-world and making sure that the wells are produced at rates and periods as will not damage either individual wells or reservoirs.
>
> "Peak demand capacity" - the ability of the gas delivery system to meet supply requirements on five or more consecutive days of maximum demand from available firm supply.

For the purpose of this study the nation has been divided into eleven producing areas. They are the states of California, Kansas, Louisiana, New Mexico, Oklahoma, Texas, the outer-continental shelf production controlled by the Minerals Management Service, Rocky Mountain states, southeastern states and the northeast and middle-western states. You have been asked to be responsible for one of the above segments. In order that the answers that we receive are uniform across the nation, it is necessary that all participants pay strict attention to the parameters and guidelines.

IT MUST BE EMPHASIZED THAT THIS COMMITTEE IS NOT INTERESTED IN ESTIMATES OF WHAT PEAK PRODUCTION WOULD BE BASED ON WELLS TEST, ALLOWABLES, RESERVES OR OTHER EXTRAPOLATING METHODS WITHIN CERTAIN LIMITED EXCEPTIONS, SUCH AS UNCONNECTED WELLS. THE COMMITTEE WANTS REAL-WORLD NUMBERS.

1. It is suggested that you solicit the cooperation of all pipelines serving your area and that you obtain your data from the dispatchers or other personnel with hands-on responsibilities for filling the pipeline on days of peak requirements.

2. For purpose of determining system capacity determine the month of largest natural gas production within the last 10 years.

3. Determine, insofar as possible, the periods of time, not less than five consecutive days in any period, in which the demand has been highest in the last three years.

4. Supply all dates of high demand used for this test.

5. To the extent known, were the high demand days referred to above days on which 100% of the available components of supply was fed into the system. If not can an estimate be made as to the percentage? Components of supply include production, storage and imports. Do not include gas purchased, traded or borrowed from another pipeline as that will create duplication.

6. As to the December 1983 - January 1984, cold spell, can an estimate be made as to the number of unconnected wells and the amount of potential production those wells could have provided.

Please complete this work and deliver it to the Headquarters Office of the IOCC, not later than September 24. A timetable adopted by the Committee is enclosed for your consideration.

Timetable:

June 13, 1984	Commission directs commencement of study.
July 20, 1984	Governor Anaya names Committee.
August 2, 1984	Committee on Gas Deliverability holds organizational meeting.
August 15, 1984	Guidelines for compiling data sent to state and regional leaders.
September 24, 1984	Leaders complete work - send data to IOCC.
October 10, 1984	Committee meets to consider draft of report.
November 10, 1984 (approximately)	Public Seminar for comments and input on findings.
December 3, 1984	Report delivered to full Commission at Annual Meeting.

Any person having any questions regarding the procedure or methodology of this study should direct those questions, either by phone or in writing to:

W. Timothy Dowd
P. O. Box 53127
Oklahoma City, OK 73152
(405) 525-3556

Senator BINGAMAN. Thank you very much.

Pete, did you have some questions?

Senator DOMENICI. Well, I just wondered—just one question. I'm aware of the Canadian situation. The true commodity cost assessment is about the only positive thing around. We have to thank the chairman of that commission for that. Before she was confirmed chairman, she was advised of that situation and made a pledge to the Senate that she would look into it. She found that the cost basis was not being fixed the same there as here. She's under a lot of pressure. I hope we will continue to support her.

I hope that the individual state authorities such as yours will continue to advise her that we feel she needs to stand by her guns. Just a general question: The furor in the last 3 or 4 years, the great competition for the delivery—that is, competition with the pipelines or groups of producers to find their own market, ship through their own pipelines or through use of excess capacity—we have all worked very hard on that concept. I don't believe it's working, do you?

Mr. LEMAY. I don't believe it is either, Senator. I don't have an answer to replace that, but I think it's an issue that should be looked at.

Senator DOMENICI. But it's having no real impact on competition where independents can get to ship oil, to your knowledge?

Mr. LEMAY. Not a big one. SoCal will look at 10,000 cubic feet a day or more. The little guy is kind of lost. He never had to market his gas. Now he does, and he doesn't know what to do.

Senator DOMENICI. Thank you.

Senator BINGAMAN. Let me just ask, given present trends, would you see a greater and greater percent of the California market being taken up by Canadian gas for the remainder of this decade? Would that be your expectation, or is there something that you see in the offing that will reverse that?

Mr. LEMAY. Mr. Chairman, I had an opportunity to go out there to San Francisco and discussed some of the marketing and also the Canadian situation with a lot of people. Actually, the Canadian producers are very unhappy with the price. It's a net-back situation they are not getting much for their gas. They would much prefer to be selling at higher prices, as well as higher volumes. I think the time frame of 3 years—2 years, 3 years, we're looking at a changing situation. Ultimately my own view—and this is just a personal view—we'll need Canadian gas. I think the shortages are such that pricewise you can liquefy gas and get it over here—my guess would be 7 or 8 days from Algeria or something. But we can't import it like we can—we can bring it across borders from Canada and Mexico, but the economics—ultimately, I think we need Canadian gas. The shortages that loom in the future are definitely going to be there. How we address those in future years compared to the gas bubble we have today, we have conflicting short-term, long-term needs.

Senator DOMENICI. Let me just comment, however, on that score that your thinking—but Canada has a contrary national policy to that. They have a national policy absolutely that their energy board says they are going to capture more and more of the market. You understand that?

Mr. LeMay. I understand that, Senator; but my comments being long-term—maybe the year 2000—something that is really beyond the projection of my ability to project, and it gets way out in the future. We need to encourage drilling here certainly.

Senator Domenici. Mr. Chairman, the problem with Canada is that they don't have a huge percentage of the American market, 5½ percent. They want to be seven and a half or eight. But the problem is that 50 percent of all of it goes to our market, California. So when they increase 25 percent, almost all of it goes to the only place ours can go. Is that correct?

Mr. LeMay. That's correct, Senator, yes. It's tough competition; and it's hard to meet, because of complicated accounting rules, the facts that I mentioned, the PG&E situation where they actually own——

Senator Bingaman. Thank you very much for that testimony; we appreciate it. Our next witness is Dick Ledbetter, who has been the president of the First National Bank since 1980, and a resident of Farmington since 1954. Dick, we're glad to have you here as a witness.

STATEMENT OF RICHARD I. LEDBETTER, PRESIDENT, FIRST NATIONAL BANK OF FARMINGTON, NM

Mr. Ledbetter. Thank you, Chairman Bingaman and Senator Domenici. I appreciate having the opportunity, as well, to present testimony today pertaining to the oil and gas industry's creditability and the repercussions therefrom. Right now I feel somewhat like Elizabeth Taylor's seventh husband on their wedding night. I know what's expected of me; I just hope I can make it interesting.

The oil and gas industry has been a cornerstone of the State of New Mexico as well as this community's economic picture for decades. As you are undoubtedly aware by hearing the testimony already presented that the economics of this industry is in a bad state of affairs. We've heard the presentation on the rig activity in New Mexico and, also, the fact that in February, the first part of February of this year, there were no rigs working in the San Juan Basin.

My concern is that unless some sort of price stability is brought about in the oil and gas industry there won't be any domestic drilling because banks in the energy belt will be unwilling to extend credit to local independent producers, drillers, service companies and others engaged in this business.

Those banks in oil and gas and oil and gas operators that believed OPEC could and would drive the energy prices to unheard of high levels have paid a bitter price, a price that the more conservative players felt that they well deserved. The Penn Squares are no longer with us, the Continental Illinois. The Seafirst Banks have learned well. But even the most conservative energy banks had every reason to rely on a better price than what the price is at current levels.

During the past 5 years we have watched the credit pendulum swing from moderate leverage to a wildly excessive leverage and back to today's levels of practically no leverage. Again, my concern is that without a stable price structure for oil and gas the credit necessary for the domestic oil and gas industry to resume a reasonable amount of exploration will not be forthcoming.

If we do not at least replace our proven reserves as they are used up, the consumer will be subjected to inevitably higher prices; and there will be a disruptive effect on the entire national economy.

With the absence of a stable pricing mechanism, financial institutions are reluctant to do credit facilities such as a borrowing base loan with revolvers to allow for exploration for new reserves or, for that matter, any other type of development loan. The banks that are still entertaining energy loans are primarily financing acquisitions of proven reserves. That does not create new reserves.

The threat of OPEC-induced shortages is not theoretical; it is real. We have only to recall 1974 and 1979 to know what OPEC can do, and at those times we had a relatively thriving domestic oil and gas industry. With the current state of our domestic industry, OPEC could bring us to our knees practically before we can unstack our rigs and find the hands to man them and, practically, if we could find the rigs. The equipment years, auction yards all across the Southwest are full of equipment. There's been several auctions. I had an opportunity to be in Fort Worth at one of the auction yards. It was loaded with oil and gas equipment. I asked the auctioneer who was buying this equipment in these depressed markets. He stated to me that the big buyers were the foreign industries. So that equipment is very well leaving our country.

And then finding the skilled labor force to reenter the industry will be a problem even in the event we experience embargos again and a crisis situation. You brought out, Mr. Chairman, that in December of 1985 there were 13,600 jobs in New Mexico directly related to the oil and gas extraction business. At the end of December these were down to 9,000 jobs, 4,600-job reduction. That's a 33-percent drop. Fortunately for some of these people that have lost their jobs, New Mexico did receive an $800,000 grant from the Department of Labor for retraining, job search and relocation assistance for the laid-off oil and gas workers and some mine workers. These people will be quite reluctant to reenter the oil and gas industry unless they can ascertain a stable work environment.

The gross income of these people still remaining is considerably less. Most everyone in the oil and gas industry has had to take cuts, fewer hours, fewer benefits; and this creates a domino effect throughout our whole community. In San Juan County statistics from the New Mexico Employment Security Department reveal that the unemployment rate in December, 1986 was 16.2 percent, compared to an exorbitantly high rate of 12.8 percent rate in December, 1985. The detrimental physical effects continue. According to Jack Smith the Federal Bankruptcy Court Clerk, bankruptcies in the State of New Mexico totaled 1,586 in 1984, 1,809 in 1985 and 2,550 in 1986. This is a 30-percent increase just in the last year. And there will be many, many more in 1987.

The San Juan County Bank's loan losses to businesses and individuals exceeded $3 million in 1986. These are dollars that could have been reinvested in our community had the loans been collectable. The local banks have experienced no growth in assets in the last six months as evidenced by the bank comparative reports I put with my packet. Bank assets have leveled off at $485 million in

June of 1986. These totals compare to $429 million total assets in 1984. This has been less than a 6-percent growth rate in a 2-year period.

At the year-end 1986 the local banks were holding 2.7 million in other real estate owned, which indicates the down side of our real estate market. The detriments of an excessively low and unstable market continues. I have enclosed copies of a number of news articles, bylined Rex Graham, a member of the Farmington *Daily Times* staff, which further depicts our gloomy economic situation. I'd like to read a few of the headlines; and these news articles are also included in my packet: February of 1986, "Falling Oil Prices to Hurt Here." And they certainly have.

March 1986, "More Than Half of Areas Oil Workers Idle."

April, 1986, "Amoco Announces Nationwide Cuts."

September 1986, "Oil Equipment Company Making Staircases—Diversification Steps."

July of 1986, "OPEC's Failure to Reach Price Accord Disappointing—Fuel Prices Should Continue To Fall."

October, 1986, an article headed up, "Unemployment Benefits Running Out." I hope it's just coincidental that at the bottom of that article another headline read, "U.S. Welcomes Gorbachev to Talk." I hope that is just coincidental.

October of 1986, "Farmington Banks Stop Growing."

November of 1986, "Competition for Jobs Frustrates Many."

In December of 1986, "Families Buying Cheaper Gifts to Cope with Less Income."

Also, "Early Christmas Sales Very Sluggish. Our retailers suffering."

In January of 1986, "Oil Prices Rise—Boosts Spirits, But Little Else."

OPEC could drive the price up to $30, $35 a barrel tomorrow, that will not put any new dollars into our oil and gas producers' pockets. They are going to have to start getting well, first, because a lot of the banks have gone with interest only on these loans. They've restructured their loans. The banks are going to be demanding pay-downs on these credits before the banking industry starts to refinance oil and gas exploration. And here's an article, "Oil Equipment Firms Announce Merger." As you well know, consolidation usually means a loss of jobs. And finally, "Drilling Rigs Sit Silent Around the San Juan Basin." I've also included information that I received from a stock analysis from Denver. And please refer to it. I think it depicts the energy situation as well. I feel bad that Senator Tim Worth is not with us today, because most of these coal companies, I believe, are based in Colorado but he'll see the various names here. You'll see that under current cash flow, if you look down the list, the companies that are in hard times far out number the ones that are having a fairly good year. But small negative cash flows, declining working capital. You'll see inadequate working capital, and in a lot of cases cash flow not sufficient to fund debt.

In summary, it just seems to me that a reasonably active and prosperous domestic oil and gas industry is in the long-term best interest of our country. A key ingredient to revising and maintaining this industry is sufficient credit to finance exploration and production by the small independent operators. And a prerequisite to any meaningful level of credit in this industry is a stable price structure. OPEC has caused many banks to unwillingly become asset-based lenders and, hopefully, the survivors have learned our lesson and will be more careful the next time around. As much as I detest the thought, Senators, failure to subsidize the price of oil and gas now, will mean having to offer Government subsidies, Government guarantees on credits, perhaps even wage subsidies with long-term contracts to get entities and the people back into the oil and gas industry. You just can't take as a bottom-hole specialist a young person out of college and put him in the oil patch and expect him to produce. A lot of these jobs take a long—a number of years of experience to become a technical expert. One thing that the oil and gas people have not lost is their sense of humor, and they like to tell stories about the bankers. I heard that two drilling contractors were discussing this situation, and one drilling contractor said that if the oil and gas price did not pick up, work didn't pick up that he might have to go out and rob him a bank. The other drilling contractor that was very heavily leveraged, had his equipment financed to the hilt at the bank, stated that if the oil and gas price did not pick up that he was afraid that he'd already robbed him one. Thank you very much.

[Attachments to Mr. Ledbetter follows:]

New Mexico Labor Market Review

EXHIBIT "1"

GARREY CARRUTHERS, GOVERNOR
EMPLOYMENT SECURITY DEPARTMENT
Paul M. Garcia, Acting Secretary
Volume 15, No. 12, January 30, 1987
Prepared by
Economic Research and Analysis
P.O. Box 1928
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HIGHLIGHTS

According to preliminary estimates, New Mexico ended 1986 with an unemployment rate of 9.3 percent. New Mexico's jobless rate edged upward during the first half of 1986 as sizeable layoffs occurred in the mining industry, particularly in oil & gas. However, since July the State's unemployment rate has remained relatively static, varying only within the narrow range of 9.0 to 9.3 percent. Largely as a result of the deterioration in the mining industry along with weakness in construction and communications & utilities, 6,100 more New Mexicans were unemployed this December than at the end of 1985. The U.S. unemployment rate (not seasonally adjusted) was 6.3 percent in December, down from both 6.6 percent in November and 6.7 percent one year ago.

New Mexico industry employment estimates, based largely on a monthly sampling of employer payrolls, indicated contrasting changes among several sectors in December. Rather strong seasonal gains occurred during the month in both trade and services. Trade employment grew by 2,500 over the month as retailers staffed up for the holiday buying season. The services industry also added a significant number of workers during December, mainly in amusements and lodging as the winter ski season got underway.

Contrasting with these gains, however, were losses in other industries in December. Employment in the mining industry suffered further damage during the month with layoffs by several major employers. Lundberg Industries closed its potash mine near Carlsbad for at least two months, resulting in the layoff of about 400 workers. Kaiser Coal Corporation furloughed 190 miners at the Cimarron mine near Raton. Molycorp terminated the final 130 miners at its Questa molybdenum mine, suspending all operations at the facility which once employed 900 workers. Employment losses also occurred during December in construction and utilities, both continuations of longer term trends in those industries.

DECEMBER SUMMARY

	Prel.	Revised		Change From	
	Dec. 1986	Nov. 1986	Dec. 1985	Nov. 1986	Dec. 1985
Civilian Labor Force	676,200	677,700	652,600	-1,500	+23,600
Employment	613,400	615,200	595,900	-1,800	+17,500
Unemployment	62,800	62,500	56,700	+ 300	+6,100
Rate	9.3%	9.2%	8.7%		

ESTIMATED NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT (JOBS)

(Prepared in cooperation with the U.S. Bureau of Labor Statistics)

NEW MEXICO	PRELIM DEC 1986	REVISED NOV 1986	REVISED DEC 1985	DEC CHANGE FROM NOV 1986	DEC CHANGE FROM DEC 1985
TOTAL NONAGRICULTURAL EMPLOYMENT 1/	528,400	527,100	527,100	1,300	1,300
MINING	14,000	14,600	20,000	-600	-6,000
Metal Mining	2,000	2,100	2,900	-100	-900
Bituminous Coal, Quarrying etc	3,000	3,600	3,500	-600	-500
Oil & Gas Extraction	9,000	8,900	13,600	100	-4,600
CONSTRUCTION	34,900	36,300	35,600	-1,400	-700
MANUFACTURING	37,800	37,900	37,500	-100	300
DURABLE GOODS	24,200	24,300	24,400	-100	-200
Lumber & Wood Products	2,700	2,700	2,600	0	100
Machinery(except electric)	2,400	2,400	2,700	0	-300
Elec & Electronic Equip	6,800	6,800	6,500	0	300
Transportation Equipment	4,100	4,100	4,300	0	-200
Other Durable Goods	8,200	8,300	8,300	-100	-100
NONDURABLE GOODS	13,600	13,600	13,100	0	500
Food & Kindred Products	4,800	4,900	4,100	-100	700
Textile & Apparel	2,400	2,400	2,400	0	0
Other Nondurable Goods	6,400	6,300	6,600	100	-200
TRANSPORTATION & PUBLIC UTILITIES	27,900	28,000	29,900	-100	-2,000
TRANSPORTATION	12,900	12,900	13,300	0	-400
Railroad Transportation	2,300	2,300	2,300	0	0
Trucking & Warehousing	6,100	6,100	6,400	0	-300
Other Transportation	4,500	4,500	4,600	0	-100
COMMUNICATION & PUBLIC UTILITIES	15,000	15,100	16,600	-100	-1,600
Communication	6,500	6,500	7,100	0	-600
Elec, Gas, & Sanitary Services	8,500	8,600	9,500	-100	-1,000
WHOLESALE & RETAIL TRADE	133,000	130,500	129,700	2,500	3,300
WHOLESALE TRADE	22,800	22,800	23,100	0	-300
Durable Goods	13,700	13,600	13,600	100	100
Nondurable Goods	9,100	9,200	9,500	-100	-400
RETAIL TRADE	110,200	107,700	106,500	2,500	3,600
Bldg Material & Mobile Homes	4,700	4,800	4,600	-100	100
General Merchandise Stores	14,700	13,900	13,300	800	1,400
Food Stores	16,500	16,300	15,800	200	700
Auto Dealers & Service Stations	13,100	13,100	13,000	0	100
Apparel & Accessories	6,800	6,100	7,000	700	-200
Furniture & Furnishing	4,600	4,500	4,600	100	0
Eating & Drinking Places	37,200	36,800	35,900	400	1,300
Miscellaneous Retail	12,600	12,200	12,400	400	200
FINANCE, INSURANCE, & REAL ESTATE	26,700	26,600	25,600	100	1,100
Banking	8,100	8,100	8,100	0	0
Insurance Carriers	3,500	3,400	3,300	100	200
Insur Agents, Brokers & Service	2,900	2,900	2,700	0	200
Real Estate	6,500	6,500	6,300	0	200
Other Fin, Ins & Real Estate	5,700	5,700	5,200	0	500
SERVICES	117,300	116,000	114,400	1,300	2,900
Hotels & Other Lodging Places	12,500	12,400	11,400	100	1,100
Personal Services	5,700	5,700	5,800	0	-100
Business Services	27,300	27,200	27,100	100	200
Health Services	27,900	27,700	27,500	200	400
Legal Services	4,100	4,100	3,800	0	300
Educational Services	4,000	3,900	4,100	100	-100
Social Services	7,700	7,700	7,200	0	500
Membership Organizations	5,300	5,400	5,800	-100	-500
Other Services	22,800	21,900	21,700	900	1,100
TOTAL GOVERNMENT	136,800	137,200	134,400	-400	2,400
FEDERAL GOVERNMENT	28,900	28,800	28,700	100	200
STATE & LOCAL GOVERNMENT	107,900	108,400	105,700	-500	2,200
State Government 2/	49,200	49,800	48,100	-600	1,100
Local Government	58,700	58,600	57,600	100	1,100

1/ Estimates include all full-time and part-time wage and salary workers who worked or received pay during the pay period which included the 12th day of the month. Self-employed, family workers, household workers and members of the Armed Forces are excluded.

2/ Includes employees of Los Alamos National Laboratory.

AREA ECONOMIC ACTIVITY

STATEWIDE: New Mexico was one of six states to receive a grant from the U. S. Department of Labor to assist dislocated workers in the mining industry. New Mexico received $800,000 for training, job search, and relocation assistance for laid off oil & gas workers and molybdenum miners in Eddy, Chaves, Lea, San Juan, and Taos counties. The grant is authorized under Title III of the Job Training Partnership Act (JTPA) and will be administered by the Training Division of the New Mexico Employment Security Department. Officials of Public Service Company of New Mexico recently disclosed that the company laid off approximately 450 workers in 1986. Most of the layoffs were in the Albuquerque area, where most of PNM's management positions are located. PNM officials said that the utility currently is in a surplus capacity situation with more electricity than is needed. The utility is looking at ways to enhance economic development in New Mexico.

ALBUQUERQUE AREA: St. Joseph Hospital has laid off 50 workers and put 17 more on part-time status as a result of declining admissions. BDM Management Services Company has received a four-year, $26 million contract to operate and maintain the Air Force Weapons Laboratory's electromagnetic pulse test facilities. Construction has begun on a $15 million retail and professional-medical complex at Wyoming and San Antonio, N.E.; developed by Suncor Enterprises, Inc., the project will include the 60,000-square-foot Pheasant Hills Shopping Center and the 80,000-square-foot Wyoming Office Plaza. Three large commercial projects were recently announced for the area near Albuquerque International Airport: Albuquerque International Business Park is a 131-acre, $20 million complex to be jointly developed by The Moore Organization and Crossroads Developers, Inc. near I-25 and Randolph Road; Cavan Sunport Center is a 41-acre, $12.6 million project to be built at Yale and Gibson, S.E. which will include numerous offices and at least one lodging facility; and Craddock Development will construct a 100-acre complex including two new office buildings and a warehouse near Yale and Renard, S.E.. The first two tenants have opened for business in the new Loretta Plaza shopping center near Louisiana and Menaul, N.E.: Chili's is a new, 6,000-square-foot, 200-seat restaurant employing 80 people; and Kurt's Camera Corral, relocated from Coronado Center, employs about six people in its 2,000-square-foot store. Geronimo's Cadillac, a new 329-seat restaurant occupying the site of the former Garcia's of Scottsdale on Uptown Boulevard, has opened for business in the remodeled facility and employs about 125 people. A new 137-room ClubHouse Inns hotel is now under construction at Menaul and I-25 in Albuquerque, and construction is expected to begin soon on a new 60-unit Super 8 Motel near I-25 in Belen; both facilities are expected to be completed by this summer. Bellamah Community Development has purchased 3,000 acres of land surrounding Paradise Hills and is planning to build nearly 2,200 single-family homes over the next several years; construction of the first 340 homes is expected to be underway by this spring. Smith's Food and Drug in Valencia has been remodeled and enlarged to a size of 50,000 square feet, making it the second largest Smith's store in the state; the store now employs 105 people. The City of Moriarty has received a $250,000 loan from the Community Development Revolving Loan Fund to construct a 22,000-square-foot building at the new Moriarty Industrial Park; the City is currently negotiating with prospective tenants. The Sandoval County Commission has awarded a contract for construction of a 22,000-square-foot, $1.9 million Sandoval County Justice Complex to be built south of the junction of NM44 and NM528.

ALAMOGORDO / RUIDOSO AREA: U.S. Army officials have indicated that the Orogrande site south of Alamogordo will be selected for the proposed Strategic Defense Command laser test facility. The Army was considering three White Sands

NEW MEXICO LABOR FORCE ESTIMATES 1/

	PRELIMINARY DECEMBER 1986				REVISED NOVEMBER 1986				REVISED DECEMBER 1985			
	Labor Force	Empl.	Unemp.	Rate	Labor Force	Empl.	Unemp.	Rate	Labor Force	Empl.	Unemp.	Rate
STATEWIDE	676,103	613,350	62,753	9.3%	677,692	615,195	62,497	9.2%	652,615	595,941	56,674	8.7%
ALBUQUERQUE MSA 2/	260,132	243,441	16,691	6.4%	258,266	241,165	17,101	6.6%	245,821	229,936	15,885	6.5%
LAS CRUCES MSA 3/	56,193	52,489	3,704	6.6%	58,319	54,379	3,940	6.8%	51,379	47,541	3,838	7.5%
SANTA FE MSA 4/	62,049	58,397	3,652	5.9%	62,197	58,639	3,558	5.7%	60,504	57,408	3,096	5.1%
Catron	1,084	873	211	19.5%	1,110	926	184	16.6%	938	749	189	20.1%
Chaves	23,155	21,052	2,103	9.1%	23,316	21,141	2,175	9.3%	22,920	21,246	1,674	7.3%
Cibola	8,548	7,077	1,471	17.2%	8,319	6,925	1,394	16.8%	8,635	6,754	1,881	21.8%
Colfax	6,772	5,495	1,277	18.9%	6,686	5,743	943	14.1%	6,781	5,843	938	13.8%
Curry	17,735	16,278	1,457	8.2%	17,971	16,507	1,464	8.1%	16,319	15,092	1,227	7.5%
De Baca	877	774	103	11.7%	949	842	107	11.3%	921	794	127	13.8%
Eddy	22,127	18,696	3,431	15.5%	22,086	19,247	2,839	12.9%	22,049	19,025	3,024	13.7%
Grant	9,874	8,814	1,060	10.7%	9,974	8,894	1,080	10.8%	9,689	8,520	1,169	12.1%
Guadalupe	1,610	1,324	286	17.8%	1,653	1,393	260	15.7%	1,685	1,402	283	16.8%
Harding	485	424	61	12.6%	541	480	61	11.3%	488	443	45	9.2%
Hidalgo	2,377	2,217	160	6.7%	2,338	2,201	137	5.9%	2,290	2,109	181	7.9%
Lea	24,446	21,259	3,187	13.0%	24,925	21,406	3,519	14.1%	26,005	24,569	1,436	5.5%
Lincoln	7,113	6,461	652	9.2%	7,153	6,528	625	8.7%	7,324	6,805	519	7.1%
Luna	5,827	4,919	908	15.6%	5,911	4,964	947	16.0%	5,479	4,589	890	16.2%
McKinley	16,822	14,607	2,215	13.2%	17,124	14,707	2,417	14.1%	17,156	14,774	2,382	13.9%
Mora	1,286	804	482	37.5%	1,358	885	473	34.8%	1,541	1,028	513	33.3%
Otero	18,002	16,575	1,427	7.9%	17,848	16,440	1,408	7.9%	16,992	15,482	1,510	8.9%
Quay	4,355	3,952	403	9.3%	4,476	4,080	396	8.8%	4,374	3,933	441	10.1%
Rio Arriba	12,864	10,183	2,681	20.8%	12,951	10,391	2,560	19.8%	13,768	11,275	2,493	18.1%
Roosevelt	7,692	7,238	454	5.9%	7,912	7,479	433	5.5%	7,345	6,961	384	5.2%
Sandoval	22,096	20,051	2,045	9.3%	22,405	20,306	2,099	9.4%	21,546	19,642	1,904	8.8%
San Juan	34,478	28,907	5,571	16.2%	34,261	28,825	5,436	15.9%	34,162	29,805	4,357	12.8%
San Miguel	10,019	8,680	1,339	13.4%	10,088	8,821	1,267	12.6%	9,919	8,629	1,290	13.0%
Sierra	2,492	2,259	233	9.3%	2,522	2,284	238	9.4%	2,208	1,984	224	10.1%
Socorro	5,774	5,237	537	9.3%	5,829	5,241	588	10.1%	5,417	4,912	505	9.3%
Taos	10,158	7,323	2,835	27.9%	9,778	7,040	2,738	28.0%	11,101	8,697	2,404	21.7%
Torrance	3,140	2,733	407	13.0%	3,184	2,799	385	12.1%	3,246	2,862	384	11.8%
Union	1,981	1,817	164	8.3%	2,111	1,933	178	8.4%	1,966	1,851	115	5.8%
Valencia	14,540	12,994	1,546	10.6%	14,131	12,584	1,547	10.9%	12,647	11,281	1,366	10.8%

1/ All estimates are made in strict accordance with methodology provided by the U. S. Department of Labor, Bureau of Labor Statistics

2/ Metropolitan Statistical Area - Bernalillo County

3/ Metropolitan Statistical Area - Dona Ana County

4/ Metropolitan Statistical Area - Santa Fe and Los Alamos Counties

EXHIBIT "2"

BANK COMPARATIVE	FIRST NATIONAL BANK OF FARMINGTON				FIRST INTERSTATE BANK OF FARMINGTON				WESTERN BANK OF FARMINGTON				SUNWEST BANK OF FARMINGTON				SAN JUAN NATIONAL BANK			
	DEC 31	JUN 30	DIFFERENCE		DEC 31	JUN 30	DIFFERENCE		DEC 31	JUN 30	DIFFERENCE		DEC 31	JUN 30	DIFFERENCE		DEC 31	JUN 30	DIFFERENCE	
(in thousands)	1986	1986	$	%	1986	1986	$	%	1986	1986	$	%	1986	1986	$	%	1986	1986	$	%
ASSETS																				
CASH AND DUE FROM BANKS:																				
NON-INTEREST BEARING	11,137	12,073	(936)	-7.8%	5,436	6,814	(1,378)	-20.2%	2,640	3,829	(1,189)	-31.1%	4,232	4,217	15	0.4%	2,437	1,217	1,220	100.2%
INTEREST BEARING	0	1,997	(1,997)	-100.0%	3,000	0	3,000	0.0%	100	100	0	0.0%	0	0	0	0.0%	400	900	(500)	-55.6%
SECURITIES	81,743	74,888	6,855	9.2%	19,232	23,378	(4,146)	-17.7%	9,090	9,646	(556)	-5.8%	11,803	12,129	(326)	-2.7%	2,131	1,749	382	21.8%
FEDERAL FUNDS SOLD	24,000	34,500	(10,500)	-30.4%	6,260	10,470	(4,210)	-40.2%	1,500	500	1,000	200.0%	1,900	150	1,750	1166.7%	240	3,650	(3,410)	-93.4%
LOANS AND LEASE FINANCING :																				
LOANS AND LEASES	106,260	99,869	6,391	6.4%	72,684	60,797	11,887	19.6%	25,232	26,981	(1,749)	-6.5%	36,829	36,560	269	0.7%	8,305	8,986	(681)	-7.6%
LESS: ALLOWANCE FOR LOSSES	(894)	(1,079)	185	-17.1%	(659)	(859)	200	-23.3%	(396)	(331)	(65)	19.6%	(448)	(446)	(2)	0.4%	(81)	(71)	(10)	14.1%
NET LOANS	105,366	98,790	6,576	6.7%	72,025	59,938	12,087	20.2%	24,836	26,650	(1,814)	-6.8%	36,381	36,114	267	0.7%	8,224	8,915	(691)	-7.8%
PREMISES AND FIXED ASSETS	3,924	4,070	(146)	-3.6%	6,436	6,638	(202)	-3.0%	1,546	1,616	(70)	-4.3%	1,888	1,831	57	3.1%	727	742	(15)	-2.0%
OTHER REAL ESTATE OWNED	0	0	0	0.0%	1,211	253	958	378.7%	1,262	984	278	28.3%	268	414	(146)	-35.3%	6	6	0	0.0%
OTHER ASSETS	2,980	3,217	(237)	-7.4%	2,089	1,796	293	16.3%	1,182	1,071	111	10.4%	683	756	(73)	-9.7%	167	190	(23)	-12.1%
TOTAL ASSETS	229,150	229,535	(385)	-0.2%	115,689	109,287	6,402	5.9%	42,156	44,396	(2,240)	-5.0%	57,155	55,611	1,544	2.8%	14,332	17,369	(3,037)	-17.5%
LIABILITIES																				
DEPOSITS:																				
NON-INTEREST BEARING	33,024	33,625	(601)	-1.8%	23,345	20,119	3,226	16.0%	6,716	7,198	(482)	-6.7%	12,965	12,793	172	1.3%	3,975	4,903	(928)	-18.9%
INTEREST BEARING	147,459	145,179	2,280	1.6%	76,757	74,090	2,667	3.6%	31,279	33,012	(1,733)	-5.2%	38,754	37,551	1,203	3.2%	9,055	11,255	(2,200)	-19.5%
TOTAL DEPOSITS	180,483	178,804	1,679	0.9%	100,102	94,209	5,893	6.3%	37,995	40,210	(2,215)	-5.5%	51,719	50,344	1,375	2.7%	13,030	16,158	(3,128)	-19.4%
SECURITIES SOLD UNDER REPO	23,273	26,276	(3,003)	-11.4%	4,641	4,168	473	11.3%	0	0	0	0.0%	425	251	174	69.3%	0	0	0	0.0%
DEMAND NOTES TO US TREASURY	809	912	(103)	-11.3%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%	0	0	0	0.0%
OTHER LIABILITIES	2,294	2,301	(7)	-0.3%	1,119	1,336	(217)	-16.2%	311	356	(45)	-12.6%	513	566	(53)	-9.4%	116	135	(19)	-14.1%
TOTAL LIABILITIES	206,859	208,293	(1,434)	-0.7%	105,862	99,713	6,149	6.2%	38,306	40,566	(2,260)	-5.6%	52,657	51,161	1,496	2.9%	13,146	16,293	(3,147)	-19.3%
EQUITY CAPITAL																				
COMMON STOCK	4,000	4,000	0	0.0%	2,500	2,500	0	0.0%	1,500	1,500	0	0.0%	1,750	1,750	0	0.0%	525	525	0	0.0%
SURPLUS	4,500	4,500	0	0.0%	6,500	6,500	0	0.0%	2,000	2,000	0	0.0%	1,750	1,750	0	0.0%	250	250	0	0.0%
UNDIVIDED PROFITS & RESERVES	13,791	12,742	1,049	8.2%	827	574	253	44.1%	350	330	20	6.1%	998	950	48	5.1%	411	301	110	36.5%
TOTAL EQUITY CAPITAL	22,291	21,242	1,049	4.9%	9,827	9,574	253	2.6%	3,850	3,830	20	0.5%	4,498	4,450	48	1.1%	1,186	1,076	110	10.2%
TOTAL LIABILITIES & CAPITAL	229,150	229,535	(385)	-0.2%	115,689	109,287	6,402	5.9%	42,156	44,396	(2,240)	-5.0%	57,155	55,611	1,544	2.8%	14,332	17,369	(3,037)	-17.5%
* * * RATIO ANALYSIS * * *																				
. . . / TOTAL DEPOSITS																				
NET LOANS	58.38%	55.25%			71.95%	63.62%			65.37%	66.28%			70.34%	71.73%			63.12%	55.17%		
NON-INTEREST BEARING	18.30%	18.81%			23.32%	21.36%			17.68%	17.90%			25.07%	25.41%			30.51%	30.34%		
INTEREST BEARING	81.70%	81.19%			76.68%	78.64%			82.32%	82.10%			74.93%	74.59%			69.49%	69.66%		
CAPITAL / TOTAL ASSETS	9.73%	9.25%			8.49%	8.76%			9.13%	8.63%			7.87%	8.00%			8.28%	6.19%		
% TOTAL ASSETS OF ALL BANKS	49.98%	50.31%			25.23%	23.96%			9.19%	9.73%			12.47%	12.19%			3.13%	3.81%		
% NET LOANS OF ALL BANKS	42.69%	42.88%			29.18%	26.01%			10.06%	11.57%			14.74%	15.67%			3.33%	3.87%		
% CHANGE OF ALL BANKS	-16.96%				280.30%				-98.07%				67.60%				-132.97%			
% EQUITY OF ALL BANKS	53.52%	52.88%			23.59%	23.83%			9.24%	9.53%			10.80%	11.08%			2.85%	2.68%		
TOTAL ASSETS ALL BANKS	458,402	456,198	2,204	0.5%																

EXHIBIT "3"

1

Falling Oil Prices To Hurt Here

Jul 6-1986

By Rex Graham
Daily Times Staff

A steep fall in crude oil prices has sent a chill through the oil and natural gas fields of northwest New Mexico, as it has the rest of the nation, and a variety of oil field-related companies are laying off employees and planning for the worst.

"It's made us nervous. We don't sleep as well," said Tom Dugan, owner of Dugan Production Corp. in Farmington.

Area crude oil prices have fallen to about $16 a barrel from a December high of about $25 a barrel. With no end to the price drop in sight, exploration companies are completing their projects, but few new ones are planned.

Because oil revenues are dropping so quickly, Dugan predicts that exploration companies will have about half the cash to spend on new drilling this year.

"And that is a drastic cut," he said. "That's a lot of cash that won't be in Farmington this year."

Studies show that oil and gas exploration directly accounts for about 14 percent of San Juan County's employment.

"It looks like most of our customers are going to put everything on hold for a while," said Larry Willinger, Farmington district manager for Halliburton Services Co. Halliburton provides a variety of oil field services.

"The part that bothers us is we don't know when it will turn around — if it will turn around," Willinger said. His Halliburton employees "are wondering who is going to work and who isn't. We've already had several meetings to tell them about the crunch we are under."

For some, the crunch has come. Four Corners Drilling Co. and Aztec Well Servicing Co. laid off a about 30 employees in January, according to the New Mexico Employment Security Department.

On Jan. 1, Willinger said he had 101 full-time Halliburton employees. On Friday, the number was down to 94.

"I'll bet by mid-year, he will be at half that," Dugan predicted. "This has happened already in nearly every oil community in the West. Farmington has been the bright spot. Now we're just catching up with the rest of them."

Last year, Dugan Production drilled 37 oil and gas wells. "This year we will drill half that," Dugan said.

Meridian Oil Co., a unit of Burlington Northern Inc., and Amoco Production Co., have not formally announced cutbacks on their exploration plans. Meridian and Amoco have historically been the most active exploration companies.

While natural gas sales far outstrip crude oil sales, natural gas prices have been dropping for about two years. And many natural gas sales contracts now link the price of natural gas to the sale price of refined crude oil products.

"With oil, you can at least sell your product," Dugan said. "With gas, you can have a hard time selling it."

The ripple effects from the latest oil slide are already being felt in Farmington.

Al Kuchera, president of Hixon Development Co., said Friday his company has "put on hold" its plans to build a new corporate beadquarters this spring.

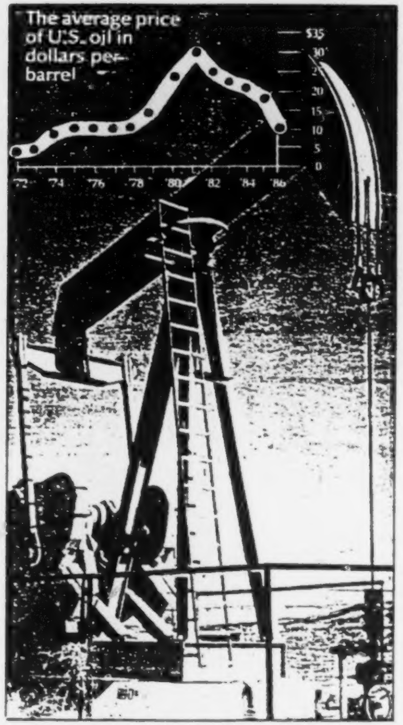
Kuchera went on: "We are going to shut down drilling. Because we don't know what the bottom is, we'll sit back and not do anything."

Unlike some companies, Dugan Production and Kuchera's Hixon Development are debt-free and,therefore,can withstand more price turbulence. For example, Dugan said even with the uncertainty of oil prices, he has no plans to lay off any of his 42 employees.

And other companies are said to be in better financial shape than during the recession years of 1982 and 1983. During that period, many poorly capitalized or poorly managed companies fell by the wayside.

But for every $1 drop in the price of a barrel of crude oil, Hixon Development, which has wells in New Mexico, Kansas and Oklahoma, loses $500,000 in revenue.

Because the price drop has been so recent, the local economy, which has more diversity than at any other time in its past, shows little sign of weakness.



(Staff file photo with AP graphic)

Oil Price on Decline

Experts say the 5-year drop in oil prices is expected to accelerate this year.

The Senate Finance ..uttee attached a token amendment to the bill and the full Senate then passed it 35-1.

Since it was amended by the Senate, the bill was returned to the House for concurrence with the amendment. The House refused to concur and the bill was sent to a conference committee.

The same House-Senate conference committee named last week to work out differences in House Bill 2, the General Appropriations Act, was also assigned to consider the special money bill.

Rep. Jerry Sandel, D-San Juan, the chairman of the House Appropriations and Finance Committee, said Saturday afternoon that the plan is either to combine the two bills into a single General Appropriations Act or to approve them as a package.

In essence, the special appropria-

California Pou

By The Associated Press

An unusually wet and windy storm that flooded homes and caused mudslides and blackouts in California spread heavy snow across the Rockies on Saturday, and the coast was threatened with more rain as new storms lined up out in the Pacific.

High wind and water blacked out thousands of people in California and some roads were blocked by water and mudslides.

Two tornadoes touched down Saturday afternoon near the San Joaquin Valley town of Dinuba causing an undetermined amount of damage.

Up to two feet of snow fell overnight at higher elevations along the Nevada-California border, with 18 inches near Cedar Breaks in Utah. Up to a foot of new snow was in parts of northern Idaho, western Wyoming and Colorado.

Highways in Colorado's mountains were described as treacherous.

The heaviest snow had moved out of Washington state, but travel was

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FIRST TIME HOME BUYERS

Leasing Mazda, Audi,
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starting at
$129.00 per mo

George Washington Sale
1st 25 Customers that Purchase $25 or More Receive Free Cherry Pie and Gift Certificate worth $5 to $50
Save 10 to 50%

ENCHILADA DINNER
Natillas, Sopaipillas & More
Today 11 AM to 3 PM
Sacred School Gym 404 N. Allen
$3.50 Adults $2 Ages 6-12

PUBLIC MEETING

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HS Hosts Tohatchi; Scorps
Top

Page B1

Student Supplement Today

Poetry, prose and artwork of students from San Juan County schools are featured in a supplement in today's Daily Times.

The work was gathered by educators and given to the Daily Times to recognize "Newspaper In Education Week," sponsored by the American Newspaper Publishers Association and the National Reading Association.

Students from all grade levels offered their work for the supplement. Advertisements for the supplement were also designed by students.

TIMES

unty's Newspaper

Three Sections 25 Cent

March 11 1986

More Than Half Of Area's Oil Workers Idled

By Rex Graham
Daily Times Staff

Oil field workers in San Juan County are being laid off in droves. The Farmington area office of the New Mexico Employment Security Department said 466 claims for unemployment compensation were received last week alone.

Hurt by cutbacks in exploration expenditures, oil field service and supply companies have laid off 2,000 employees during the past few weeks, or more than half the county's total oil and gas workforce of 3,400.

"It doesn't look good for them to go back to work," said Beverly Adams, Farmington area manager of the Employment Security Department. "We are having people coming in who have worked for companies for eight, nine and 10 years. Sometimes the employers tell them to check back in six weeks. But this time they are saying there is no recall date."

The employers involved include Halliburton Services Co., Four Corners Drilling, Aztec Well Servicing Co., Western Co., Walters Drilling, American Tank and Steel Corp., Electrical Energy Services Inc., Big A Well Services, Welex, Smith Energy Services, Energy Search and Drilling Co. and Weatherford.

A spokesman in Houston, Texas, for Western Co.'s chairman, Eddie Chiles, said 20 Farmington employees were "terminated and will not be reassigned." Asked how long the downturn would last the spokesman said, "It would be imprudent for me to forecast. It's just impossible to forecast."

Employment Security's Ms. Adams said the layoffs have been confined to the service and supply companies. Production companies, however, which are suffering because of plummeting petroleum prices, have not laid off workers.

The pace of layoffs appears to have fallen. Employment officials say that many idle workers are calling employers around the country looking for work.

"Unfortunately, it is going to be a problem relocating these people because we don't have a pickup anywhere else" in the county.

San Juan County reported a total workforce of 34,089 at the end of January when the unemployment rate was 13.1 percent.

"From all indications, the San Juan County unemployment rate will increase substantially in March," said Larry Blackwell, an economic analyst with the ESD in Albuquerque.

Statewide, Blackwell said there were 13,500 jobs in oil and gas extraction and production in January. That was down 400 jobs from last January, and down 3,700 from the peak oil and gas employment of 17,200 in January 1982.

Blackwell said Lea and Eddy counties were hit with layoffs in February.

Lee Reynis, chief economist with the state Department of Finance and Administration, said the state has little idea of what the impact of the oil layoffs will be.

"I find it really astounding," she said of the sudden downturn in oil prices and resulting employment decline. "It is something we are very concerned about."

The economist said the drop in oil prices does have "some offsetting effects," like lower gasoline prices. "It is like a windfall to the consumer," she said. "And New Mexico is not without being affected by those positive impacts."

Federal budget cuts in job training and displaced worker relocation funds are coming at a bad time for the latest round of layoffs.

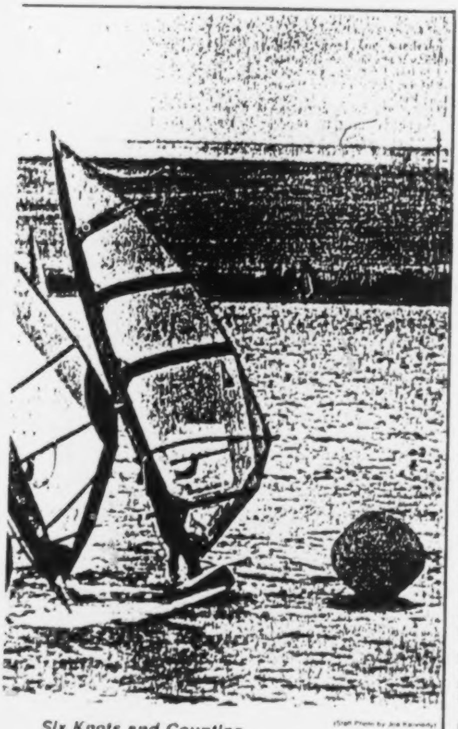
Norm Marin, chief of the Governor's Administrative Entity for the Job Training Partnership Act, said the state plans to contact U.S. Sen. Pete Domenici, R-N.M., and alert him to the oil field's employment troubles. "Domenici was real helpful last year," Marin said.

Title III of the Job Training Act, which has come under the federal government's budget cutting ax, is due to give New Mexico only $415,000 for the upcoming fiscal year. The money is to be used for up to $1,000 per worker in relocation expenses, counseling, and education and retraining.

Last year, Marin said Domenici was instrumental in transferring $1.2 million of federal discretionary funds into the state's Title III program to help laid-off miners.

Marin said the first option of a laid-off worker is to move to an area where he can earn a comparable salary, rather than retrain for a new job skill.

"Now the money for relocation assistance has run out," Marin said.



Six Knots and Counting

(Staff Photo by Joe Kennedy)

inflatable buoy on warm up for racing. More than 60 spend three days racing and socializing in the First Annual Morgan Lake Windsurfing Event. Sunday's cold and windy weather was just what the experts wanted.

/ins Oil Tax Ruling

[illegible]

that the state tax infringed on the sovereignty of the Jicarilla Apache Tribe, which also imposes a severance tax and a privilege tax on oil and gas production on the reservation.

Kaufman noted in his decision handed down late Monday that the Jicarilla Tribe had not challenged the imposition of the state taxes on the oil companies operating on the [illegible]

[illegible] that Cotton Petroleum [illegible]

taxes do not discriminate against interstate commerce, that the taxes are fairly apportioned and that the taxes are related to the services provided by the state.

State Taxation and Revenue Secretary Vickie Fisher said Monday that Cotton Petroleum is one of about a dozen oil companies that have challenged the state's authority to impose severance taxes on oil and gas production from the Jicarilla and Navajo Indian reservations.

The companies have paid the state taxes under protest and from $20 million to $22 million in protested tax payments are being held in escrow pending final determination of the issue, Ms. Fisher said.

[illegible] pleased with Kaufman's

3 Escape Forced Landing

Compiled By Times Staff Writer

NORWOOD, Colo. — A Cessna 210 that was en route to Farmington was forced to land on a snow-covered dirt road near here Monday, according tothe San Miguel County Sheriff's Department.

The pilot of the plane, Rachel Seiferle of Farmington, N.M. and two unidentified pasengers escaped injury, but the plane sustained minor damage landing in about 8 inches of snow on the road, said Sgt. Eric Berg. The landing was about 10 miles south

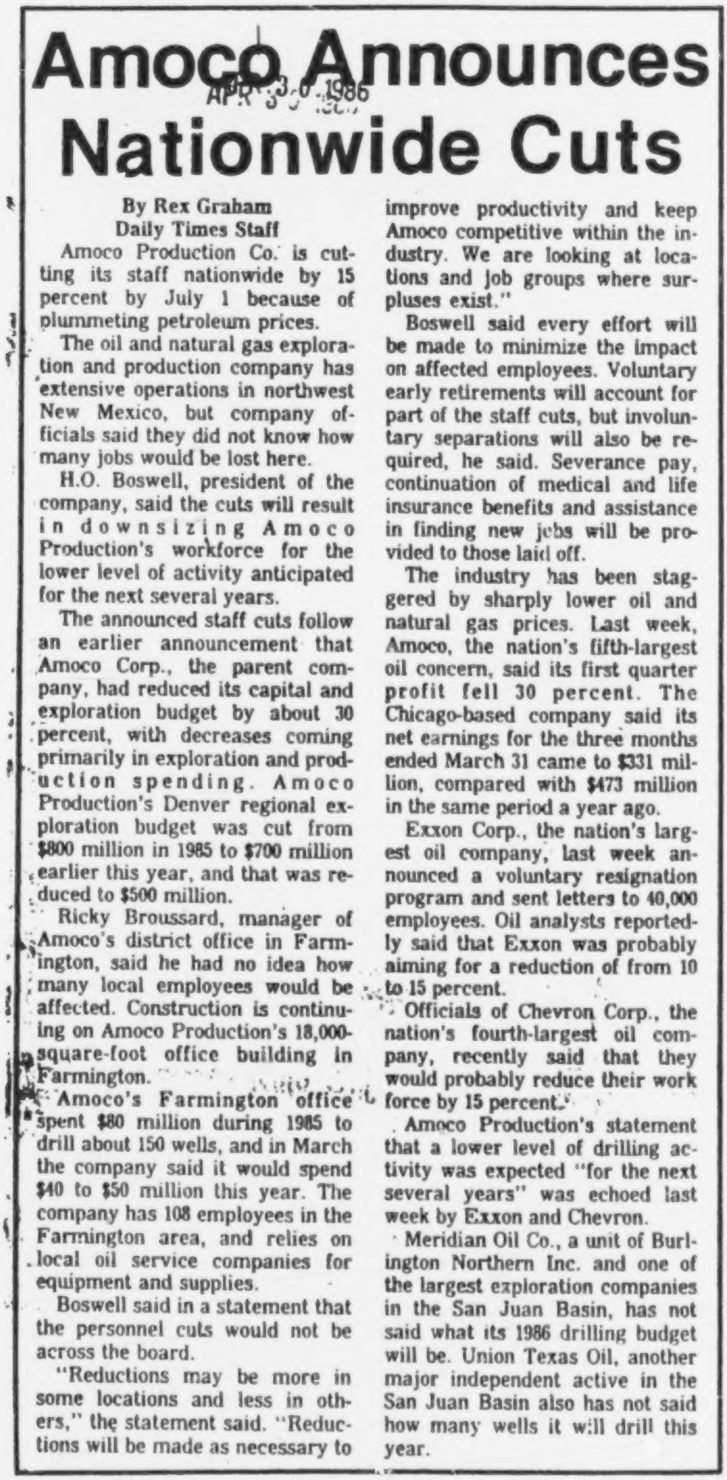
Tornadoes, High Winds Hit Midwest

By The Associated Press

The National Guard patrolled two Kentucky cities today under states of emergency declared after at least 20 tornadoes sliced through three states, killing six people, injuring more than 100 and leaving 20,000 people without power.

The tornadoes and winds of up to 90 mph that struck late Monday afternoon in Indiana, Ohio and Kentucky left Cincinnati's airport — across the Ohio River in Erlanger, Ky. — a shambles, with up to 50 planes damaged beyond repair, officials said.

Across the three states, the storms and tornadoes tore roofs



Amoco Announces Nationwide Cuts

APR 30 1986

By Rex Graham
Daily Times Staff

Amoco Production Co. is cutting its staff nationwide by 15 percent by July 1 because of plummeting petroleum prices.

The oil and natural gas exploration and production company has extensive operations in northwest New Mexico, but company officials said they did not know how many jobs would be lost here.

H.O. Boswell, president of the company, said the cuts will result in downsizing Amoco Production's workforce for the lower level of activity anticipated for the next several years.

The announced staff cuts follow an earlier announcement that Amoco Corp., the parent company, had reduced its capital and exploration budget by about 30 percent, with decreases coming primarily in exploration and production spending. Amoco Production's Denver regional exploration budget was cut from $800 million in 1985 to $700 million earlier this year, and that was reduced to $500 million.

Ricky Broussard, manager of Amoco's district office in Farmington, said he had no idea how many local employees would be affected. Construction is continuing on Amoco Production's 18,000-square-foot office building in Farmington.

Amoco's Farmington office spent $80 million during 1985 to drill about 150 wells, and in March the company said it would spend $40 to $50 million this year. The company has 108 employees in the Farmington area, and relies on local oil service companies for equipment and supplies.

Boswell said in a statement that the personnel cuts would not be across the board.

"Reductions may be more in some locations and less in others," the statement said. "Reductions will be made as necessary to improve productivity and keep Amoco competitive within the industry. We are looking at locations and job groups where surpluses exist."

Boswell said every effort will be made to minimize the impact on affected employees. Voluntary early retirements will account for part of the staff cuts, but involuntary separations will also be required, he said. Severance pay, continuation of medical and life insurance benefits and assistance in finding new jobs will be provided to those laid off.

The industry has been staggered by sharply lower oil and natural gas prices. Last week, Amoco, the nation's fifth-largest oil concern, said its first quarter profit fell 30 percent. The Chicago-based company said its net earnings for the three months ended March 31 came to $331 million, compared with $473 million in the same period a year ago.

Exxon Corp., the nation's largest oil company, last week announced a voluntary resignation program and sent letters to 40,000 employees. Oil analysts reportedly said that Exxon was probably aiming for a reduction of from 10 to 15 percent.

Officials of Chevron Corp., the nation's fourth-largest oil company, recently said that they would probably reduce their work force by 15 percent.

Amoco Production's statement that a lower level of drilling activity was expected "for the next several years" was echoed last week by Exxon and Chevron.

Meridian Oil Co., a unit of Burlington Northern Inc. and one of the largest exploration companies in the San Juan Basin, has not said what its 1986 drilling budget will be. Union Texas Oil, another major independent active in the San Juan Basin also has not said how many wells it will drill this year.

Business

Sept. 13, 1986

Saturday, September 13, 1986 Farmington (N.M.) Daily Times

Oil Equipment Company Making Staircases

By Rex Graham
Daily Times Staff

In the normally greasy American Tank and Steel Corp. fabrication facility is a shining example of what some Farmington oil field equipment fabricators are trying to do: Diversify.

American Tank welders this week completed work on a stylish, polished-brass staircase — the company's first. It was shipped on Wednesday to Hayward, Calif., for installation in an office building under construction.

"We hope to build more of them," said Mike Kemper, president of the Farmington-based firm. "There is a fairly big market on a national level."

American Tank needs the work. Plummeting crude oil and natural gas prices have caused producers to forego exploration. New Mexico's active rig count was 19 on Monday, up from 14 a month ago, but down from 69 active drilling rigs last year at this time.

The New Mexico Oil Conservation Division says that in June of this year 12.4 percent of northwest New Mexico's 14,807 natural gas wells were turned off, up from 3.8 percent in June 1985.

"It is something the service companies have no control over," Kemper said. "That's why we're glad we've done some of these things to diversify — it's helped cushion the blow" of sharply lower oil equipment sales. (Kemper said he had no comment on a rumor that American Tank might merge with the local branch of Weatherford.)

Still, diversification takes time. American Tank cut its workforce from 300 to 75 during this year, laying off everyone from welders to middle managers. At the same time, however, it began looking beyond the oil patch for buyers of fabricated steel products.

A break came recently in Tulsa, Okla.

George Sealy, a Chicago investor who purchased American Tank in 1983, was talking to Stewart Gibbs, president of Gibbs & Associates, a nationwide supplier of staircases to commercial construction companies.

"He was looking at an acquisition of another company in Tulsa and he described the Farmington facility," Gibbs said in a telephone interview. "It was just one of those things that comes out of conversations."

Gibbs visited the American Tank fabrication plant on San Juan Boulevard and offered Kemper a contract for one staircase. Since the staircase was to be built for a California building, Gibbs said he decided to try the Farmington company "as an experiment" because it was closer to the destination than his regular Tulsa subcontractor.

"We were pleasantly surprised with the quality," Gibbs said. "We sent two more (staircase orders) for them to estimate for us. We've talked about long-term arrangements but nothing has been solidified." He said the staircases sell for $50,000 to $200,000 each.

A long-term subcontracting arrangement would presumably hinge on the profitability of the deal for American Tank. The company's president said he couldn't release details.

"We're kind of getting into it gradually to see how it works," Kemper said. In 1983, American Tank was awarded a $88,000 defense subcontract with Rockwell International to build steel support equipment for the B-1B bomber. But the Farmington company has not pursued highly competitive defense work.

Fabrication company executives say that Farmington companies are at a disadvantage on defense equipment bidding because their transportation costs are greater. Kemper said the shipping costs for the staircases is a small percentage of the overall price, and does not put it at such a price disadvantage.

The company president added that his employees adapted to staircase construction techniques with ease.

"For the bulk of it, we didn't have a steep learning curve." He said that his welders can weld brass banisters as easily as steel oil tanks. The company also made use of its existing machine shop equipment.

"One of the things we had to convince him of is when the oil business comes back, we'd have the capacity to continue," the 35-year-old president said.

American Tank is not abandoning its main line of business — oil and gas equipment. The company recently became the contractor for the Gatlin Burner, a highly fuel-efficient burner and heat exchanger used in gas processing equipment. The burners have other operating efficiencies and could in theory be practical for every natural gas well in the region.

But like other oil and gas equipment, the burners are not selling.

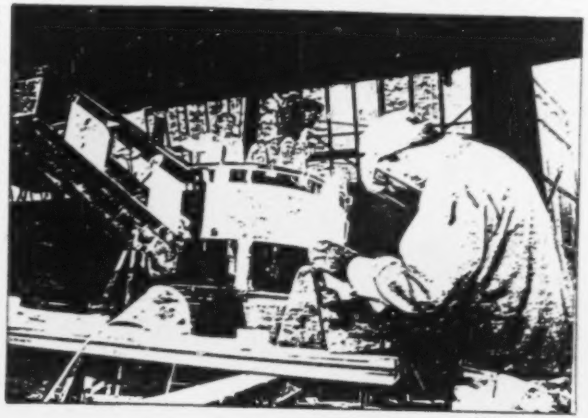
Richard Topper, production manager of Gatlin Burner working at American Tank's San Juan Boulevard plant, said the burner pays for itself in fuel savings in one year. Natural gas and oil producers are unimpressed.

"We've been told by some customers, 'We're not buying anything over a three-month return on investment,'" Topper said.

That logic is making American Tank look more to non-oil field business.

The president of the staircase company, Gibbs, said he was involved in the oil and gas business for 12 years and is familiar with its woes. And yet he said diversification is often shunned.

"It's difficult to get old-line oil and gas companies accustomed to think differently," Gibbs said. "It takes a special management group to see the need to diversify."



Staff Photo by Joe Kennedy

Diversification Steps

American Tank and Steel Corp.'s Farmington employees go over the final details of a new product made by the local oil equipment company.

Underground Economy Baffles Experts

By Leonard Silk
N.Y. Times News Service

NEW YORK — The state of the American economy, with the stock and bond markets swinging back and forth in the last few weeks, has been baffling policy makers and investors. Is it on the verge of recession or is it gaining strength again? Are consumers so deeply in

One of the sources of uncertainty about the actual state of business conditions is what is happening in the "underground economy" — the huge slice of national income that goes unreported to escape taxation. A lot of that underground income comes from drug dealing, burglaries, illegal gambling and other criminal activities, but much of it is

that the underground economy in the United States is bigger than earlier studies have found.

According to O'Leary's method of calculation, disposable personal income on a cash basis (excluding barter deals) in the American underground economy averaged only about 5.7 percent a year of the total disposable income during 1971-75

counts. The Fed's savings figures, which run substantially higher than the Commerce Department's, are built on the net increase each year in the total amount of financial assets — including currency, checking deposits and time and savings deposits — held by individuals plus their net investment in tangible assets. By comparison, the Commerce

Briefs

The El Paso Co. announced that it is transporting only 35 percent of the natural gas available to it in the San Juan Basin of northwest New Mexico. The company refused to say how many of its wells have been turned off. Independent producers in the San Juan Basin have shut in more than 12 percent of their wells. El Paso spokesman John McFall said the company is currently selling one billion cubic feet of natural gas per day, including 250 million cubic feet from the San Juan Basin. McFall said the pipeline also is transporting 1.3 billion cubic

Penalties for driving while intox-

JUL 1 1986

OPEC's Failure To Reach Price Accord 'Disapointing'

By Rex Graham
Daily Times Staff

The breakup Monday of the meeting of the Organization of Petroleum Exporting Countries without a production agreement triggered a sag in the emotions of Farmington oil and gas producers.

Following the Monday breakup, crude oil settled 42 cents to 65 cents lower, with the contract for delivery in August at $12.78 a barrel at the end of trading Monday on the New York Mercantile Exchange.

The price for West Texas Intermediate crude, the most widely traded U.S. oil, was as high as $31.70 a barrel as recently as November.

"You can only withstand so much of this stuff," said Gregory Merrion Sr., owner of Merrion Oil and Gas Corp. "The domestic (petroleum) industry is being badly hurt."

Farmington oil and gas producers view an oil-import fee as a mechanism to keep keep their industry afloat, but concede that the price support lacks consumer and congressional support. But they argue that such a fee would not only help them survive, but also protect consumers from Middle East-inspired pricing tactics that, over a few years, could send gasoline and other fuel prices rising as quickly as they have come down.

Merrion said the relatively small decline in futures prices on Monday was a reflection of an outlook before the OPEC meeting that oil ministers could not engineer a rise in prices.

At the same time, he said continuing low crude oil prices and uncertainty over future prices are crippling New Mexico producers.

"It is going to, I'm sure it already has, caused a lot of bankruptcies, and I'm sure it will wreak some more havoc before its over," Merrion said. Even if prices climb, he said investors will be reluctant to resume exploration.

"Even if we have $28 a barrel oil tomorrow, attitudes will change," Merrion said. Instead of expecting a 15 percent return on equity investments, he said producers and other investors will expect a 25 or 30 percent profit due to the risk of investing in oil.

Tom Dugan, owner of Farmington-based Dugan Production Corp., said oil experts say a barrel of crude may hit $17 to $19 by the end of the year and remain there for up to two years. "That will keep us alive," he said, "but there will be no drilling" at that price.

"All of us are optimistic, or we wouldn't be in this business," Dugan said. And yet Dugan and Merrion said producers in this country are at a disadvantage because Saudi Arabia and other Mideast countries are removing price incentives to drill even as domestic reserves shrink.

The consensus in the energy business is that prices won't continue to decline indefinitely.

W.J. "Jack" Bowen, chairman and chief executive officer of Transco Energy Co., told San Juan County producers recently that this country is laying the foundation for another price shock that, like the 1974 oil embargo, could send the country into a recession.

"By 1990, we will be importing 50 percent of our oil," Bowen said at a Farmington luncheon sponsored by Boettcher & Co. "This will be a very serious thing." He said non-OPEC and non-Communist oil production has peaked out and the United States will rely more on "the unstable Middle East."

Bowen said Congress has shown how "shallow" it is by not establishing an oil-import fee to protect the domestic petroleum industry. "What is being played out in this country is exactly what I would want if I was OPEC," Bowen said.

He said the country is being lulled into a false sense of security by current low oil prices.

"A few months ago, the government said we are better off than we have been for years," Bowen said. But he claimed the proven reserves of oil in the lower 48 states and Alaska "are 70 percent of what they were in 1973."

"The people in Boston don't really care about the economy in Farmington," he went on. "All they want is cheap energy, and the only way we can sell (an oil-import fee) is with national security" arguments.

Fuel Prices Should Continue To Fall

By The Associated Press

Analysts say OPEC's inability to reach agreement on a way to push oil prices higher should help U.S. motorists hold down vacation driving budgets.

"Gasoline will be a nickel a gallon lower by August than it is now," said Scott Jones, an energy analyst at Chase Econometrics Inc., a private consulting firm.

Ministers of the Organization of Petroleum Exporting Countries ended a meeting in Brioni, Yugoslavia, on Monday with no agreement on an issue that has been plaguing the 13-nation cartel for years — how to cut members' production to prop up slumping prices.

In U.S. markets, traders responded by bidding down oil and oil products.

Unleaded gasoline for July delivery dropped 1.38 cents to 39.67 cents a gallon Monday on the New York Mercantile Exchange.

"I think we're going to have low oil prices for at least five years," said Philip Verleger Jr., an oil analyst with the consulting firm Charles River Associates.

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uation, performed at the women's New Mexico Correctional Facility at Grants, said Monfore is a danger to society, and recommended that he be sentenced to the full 18 months in prison allowed by law.

His attorney, Doug Moeller, told the court Monday that the staff at the Grants facility didn't like Monfore because he stood by his claim of innocence. Psychologists are treatment-oriented. They're trained

Business

October 4, 1986

Farmington Banks Stop Growing

By Rex Graham
Daily Times Staff

When asked to describe the current banking environment in Farmington, Sunwest Bank President Rex Campbell leaned back in his chair, flashed a broad smile and said, "Tough."

The city's other four bank presidents agree.

Farmington banks will report little or no growth for the third quarter of this year, which they say reflects the area's sluggish economy.

Although summaries of the banks' third-quarter "call reports" to the Comptroller of the Currency have not been published, the executives say the slowdown in oil and gas exploration and production is responsible for constricting loan demand and deposit growth.

All the banks will report profits, but their net interest or profit margins are shrinking.

"We were in the black for the third quarter, but it wasn't a very good quarter," said Dennis Peterson, president of San Juan National Bank in Farmington.

Peterson said San Juan National's total assets have fallen from $17 million at the end of June to $14 million at the end of September. "Our loan total went back to $8 million" from $9 million three months earlier, he said.

The First Interstate Bank of Farmington, which posted a $2 million loss in 1985, is the only local bank that will report substantially improved results for 1986. Its president, David Dobbs, said his bank will post net income of about $800,000 for the first nine months of this year.

The bank hired Dobbs as president last year, wrote off a number of bad loans and made other management changes. "We're doing moderately well," Dobbs said this week. "We are feeling the effects of (oil field) layoffs."

First Interstate's loan total fell from $66 million on Dec. 31, 1985, to $60.8 million at the end of June. "We do not intend to grow this year," Dobbs said. "But if the economy did, we would."

Farmington's tough banking environment is not unique.

A July report in Economic Review, a publication of the Federal Reserve Bank of Kansas City, said most banks in its 10th District reported lower 1985 profits and mounting loan losses. The Fed's 10th District includes New Mexico, Colorado, Wyoming, Oklahoma, Missouri, Kansas and Nebraska.

"Measured by either ROE (return on equity) or ROA (return on assets), the profitability of commercial banks in 10th District states fell in 1985 for the fourth year in a row," the report said.

"The main cause of increased loan losses at district banks has been the downturn in energy and agriculture, two sectors that are much more important in this region than the nation as a whole," the report said. "In addition, the recession in energy and agriculture have had serious ripple effects in some communities, imposing bank losses in other businesses."

Farmington, while classified as a rural community, increasingly has become a regional trade center. Another report by the Federal Reserve Bank is more optimistic about towns that have become meccas for retirees.

"Rural counties that are becoming wholesale and retail trade centers may be another group with growth potential," the Federal Reserve report said, "though perhaps at the expense of traditional Main Street business in neighboring communities."

"We're really lucky to be in this part of the state," said Myron Taylor, senior vice president with the First National Bank in Farmington. He said the diversity of the Four Corners economy, including its power plants, retail and wholesale trade and other non-energy business activity, is helping banks.

First National's total assets rose from $208 million at the end of 1985 to $229 million on June 30. The growth made First National the state's sixth-largest bank, up from eighth place at the end of 1985, according to a ranking by the state Treasurer's Office. First National's $21.2 million in equity capital put it in fourth place statewide behind three Albuquerque banks.

But even First National is finding growth difficult to maintain.

Its total assets dipped slightly to $225 million at the end of the third quarter. Like most of the local banks, First National is continuing to boost its loan loss reserves. By June 30, that reserve was increased 20 percent in six months to $1.85 million, or 1 percent of total loans. Western Bank, Sunwest and San Juan National also boosted their loan loss reserves by a proportionate amount.

In contrast, First Interstate cut its loan loss reserve during the same six-month period from $1.38 million to $859,000 on June 30. Its president, Dobbs, said that most of the bank's bad loans have been written off, allowing it to drop its loan loss reserve to $727,000 on Sept. 30.

"So, we're still over 1 percent" of total loans, Dobbs said. "We have a comfortable cushion in there."

Dobbs said First Interstate's return on assets, a key measure of bank performance, has climbed to 1 percent. First Interstate's return on assets was negative 1.75 percent in 1985 due to its $2 million loss, according to Cates Consulting Analysts Inc., a New York bank analysis firm.

Cates Consulting analyzes the call reports of every bank in the country. For banks the size of Farmington's four largest institutions, Cates reported a 1.05 percent return on assets nationwide. Two local banks — First National and Sunwest — handily outperformed their peers in 1985. Two other Farmington banks — First Interstate and Western — had lower returns on assets than their peers.

Cates Consulting reported that First National's 1985 return on assets was 1.5 percent. Sunwest Bank's so-called ROA was 1.24 percent and Western Bank's was .52 percent.

San Juan National Bank, Farmington's smallest bank with $17.5 million in total average assets in 1985, had a higher return on assets (.75 percent) than banks of similar size in this region (.40 percent). San Juan National's return on assets was about equal to the national average for banks of similar size — .8 percent.

An indicator of future loan losses, and hence lower profitability, is the amount of non-performing loans on a bank's books. At the end of 1985, Cates Consulting found a wide variation among local banks' ratios of non-performing loans to total loans. Those ratios were: First National, .86 percent; First Interstate, 7.12 percent; Sunwest, 1.88 percent; Western, 10.94 percent; and San Juan National, .77 percent.

But even First National is struggling with deteriorating loans.

"Before the end of the year, our charge-offs will be more than recent years," said Richard Ledbetter, president of First National. "It's a humbling experience. We haven't dodged that bullet."

First National reported $3.3 million in net income for 1985, while Sunwest Bank came in second with a $674,000 net income. Western Bank netted $239,000 and San Juan National netted $107,000 in 1985.

First National will probably lead the pack again this year, but Ledbetter said profits will be helped by realizing capital gains on securities sales and better than usual performance from the bank's trust department.

If local banks' non-performing loans soar in 1987, Ledbetter said loan loss reserves and banks' equity capital would be more than enough to help them weather the losses. The First National president said the local banks are doing all they can to help struggling companies.

"A lot of these people who are having a hard time right now are not deadbeats," Ledbetter continued. "They just got caught in bad economic conditions."

The bank presidents predict that many troubled businesses will stay depressed until petroleum prices rise and exploration activity resumes.

"We're somewhat apprehensive at the bank," Ledbetter said. "We know there are difficult times ahead."

ALL PERFORMANCES BEFORE 6:00 ADULTS $2.50
CAMEO "TOP GUN"
CENTENNIAL
ANIMAS 4
STATE OF EMERGENCY

MARTIN SHEEN
STATE OF EMERGENCY
PG
ANIMAS 4
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THIS WEEK
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KITCHEN KRAFT

Interest Rate

Q. Almost all of my money is in certificates of deposit maturing early next year. I live on the interest from these CDs and am quite concerned about the lower interest rates now prevailing. My income will be drastically reduced, if I have to renew my CDs at these low rates. This being a congressional election year, do you predict interest rates will go up?

A. This column has always shied away from interest rate predictions for the simple reason that no one — repeat, NO ONE — can accurately forecast the long-term direction of these rates. But this is one of the few times that kind of question has not shattered my dimly clouded crystal ball.

The possibility of interest rates

October 4, 1986

Farmington Banks Stop Growing

By Rex Graham
Daily Times Staff

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ALL PERFORMANCES BEFORE 6:00 ADULTS $2.50
CAMEO "TOP GUN" (PG) 12:50 5:00 [illegible]
CENTENNIAL "PLAYING FOR KEEPS" (PG-13) 12:40 2:55 [illegible]
"WHOOPEE BOYS" [illegible]
ANIMAS 4 "STATE OF EMERGENCY" (PG) 12:50 2:55 [illegible]
"LINK" [illegible]
"BOY WHO COULD FLY" (PG) 12:45 3:00 [illegible]
"HEARTBURN" [illegible]

MARTIN SHEEN

Briefs

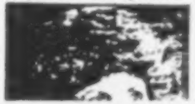
San Juan County's unemployment rate dipped slightly in August, according to a preliminary report by the state Employment Security Department. The report said the county's jobless rate was 17.5 percent in August, down from 18.9 percent in July. In July 1985, the county's unemployment rate was 13.7 percent. Meanwhile, the state's unemployment rate fell from 9.5 percent to 9 percent in August. "This is a continuation of the normal decline from June's seasonal jobless peak," an ESD statement said. The national rate of unemployment was 6.7 percent in August, down from 7 percent in July. In New Mexico, the ESD reported, summertime job expansions in trade, manufacturing and construction pushed total nonagricultural payroll employment up 900 jobs in August. San Juan County's labor force was listed at 35,418 in August, including 29,215 people employed and 6,203 unemployed. Mora County had the state's highest August unemployment rate of 30.5 percent. With 4.9 percent unemployed, Lincoln County had the state's highest rate of employment. Bernalillo County posted a 6.4 percent unemployment rate.

Active Rig Count

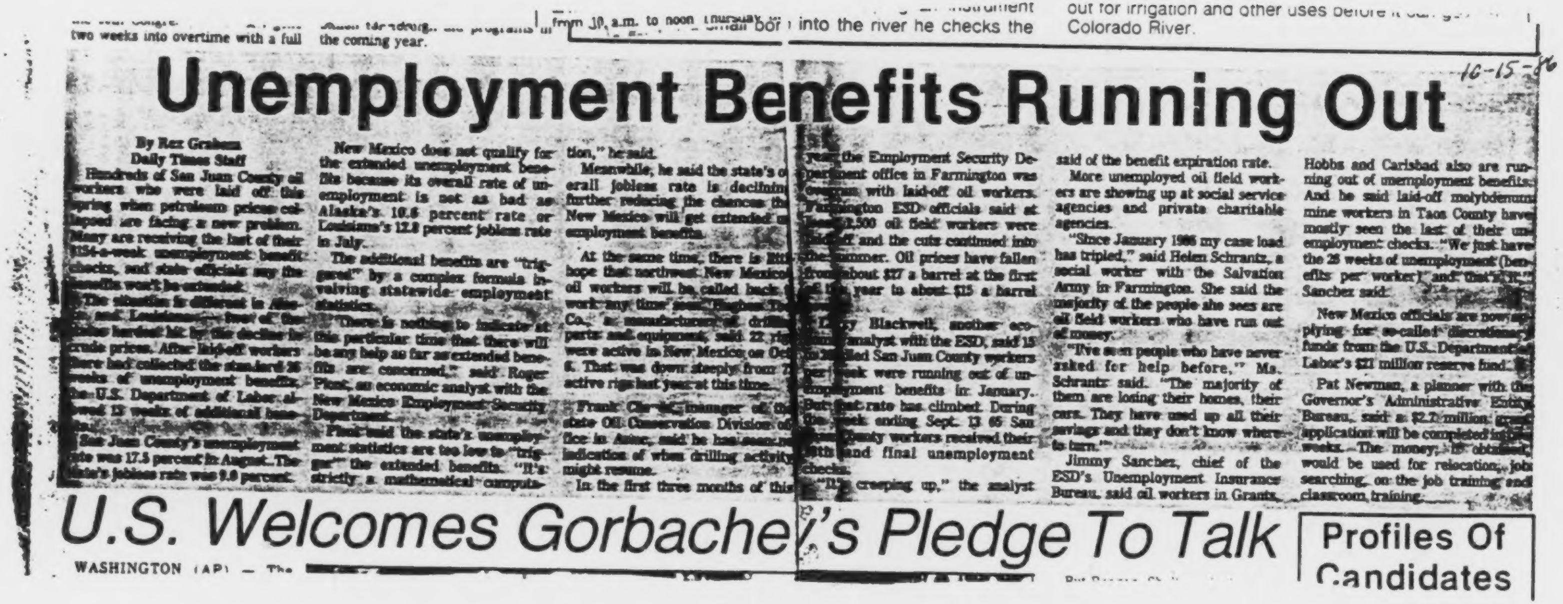
	Sept. 29 1986	Sept. 25 1986	Sept. 30 1985
New Mexico	21	19	73
Texas	256	216	626
Colorado	18	27	58
Utah	10	12	21
Arizona	0	0	1
Wyoming	23	22	101
Total U.S.	806	731	1,935

(Source: Hughes Tool Co. and the International Association of Drilling Contractors)

Rocky Mountain Aquaculture Corp. is completing its experimental catfish rearing project in cooperation with Navajo Agricultural Products Industries. Yancy Roberson, founder of Rocky Mountain Aquaculture, said he can't release details of the first year's growth season. He said local restaurants have expressed little interest in buying his fish, which he says are superior in flavor to catfish raised in the South. San Juan Regional Medical Center, which purchased 125 pounds of Roberson's fish, reported brisk sales of the locally grown catfish during a special promotion on Friday.



Pamela Leonard, assistant vice president and operations manager with Sunwest Bank in Farmington, has received a Jean Arnot-Reid Scholarship from the National Association of Bank Women. Ms. Leonard will enroll at Mundelein College in Chicago to earn a bachelor's degree in business administration. She has been with Sun-



two weeks into overtime with a full

the coming year.

from 10 a.m. to noon Thursday

into the river he checks the

out for irrigation and other uses before it

Colorado River.

10-15-86

Unemployment Benefits Running Out

By Rex Graham
Daily Times Staff

Hundreds of San Juan County oil workers who were laid off this spring when petroleum prices collapsed are facing a new problem. Many are receiving the last of their $154-a-week unemployment benefit checks, and state officials say the benefits won't be extended.

The situation is different in Alaska and Louisiana — two of the states hardest hit by the decline in crude prices. After laid-off workers there had collected the standard 26 weeks of unemployment benefits, the U.S. Department of Labor allowed 13 weeks of additional benefits.

San Juan County's unemployment rate was 17.5 percent in August. The state's jobless rate was 9.8 percent.

New Mexico does not qualify for the extended unemployment benefits because its overall rate of unemployment is not as bad as Alaska's 10.6 percent rate or Louisiana's 12.8 percent jobless rate in July.

The additional benefits are "triggered" by a complex formula involving statewide employment statistics.

"There is nothing to indicate at this particular time that there will be any help as far as extended benefits are concerned," said Roger Pless, an economic analyst with the New Mexico Employment Security Department.

Pless said the state's unemployment statistics are too low to "trigger" the extended benefits. "It's strictly a mathematical computation," he said.

Meanwhile, he said the state's overall jobless rate is declining, further reducing the chances that New Mexico will get extended unemployment benefits.

At the same time, there is little hope that northwest New Mexico oil workers will be called back to work any time soon. Hughes Tool Co., a manufacturer of drilling parts and equipment, said 22 rigs were active in New Mexico on Oct. 6. That was down steeply from [illegible] active rigs last year at this time.

Frank Chavez, manager of the state Oil Conservation Division office in Aztec, said he has seen no indication of when drilling activity might resume.

In the first three months of this year the Employment Security Department office in Farmington was overrun with laid-off oil workers. Farmington ESD officials said at least 2,500 oil field workers were laid off and the cuts continued into the summer. Oil prices have fallen from about $27 a barrel at the first of the year to about $15 a barrel.

L[illegible]y Blackwell, another economic analyst with the ESD, said 15 [illegible] San Juan County workers per week were running out of unemployment benefits in January. But that rate has climbed. During the week ending Sept. 13 65 San Juan County workers received their 26th and final unemployment checks.

"It's creeping up," the analyst said of the benefit expiration rate.

More unemployed oil field workers are showing up at social service agencies and private charitable agencies.

"Since January 1986 my case load has tripled," said Helen Schrantz, a social worker with the Salvation Army in Farmington. She said the majority of the people she sees are oil field workers who have run out of money.

"I've seen people who have never asked for help before," Ms. Schrantz said. "The majority of them are losing their homes, their cars. They have used up all their savings and they don't know where to turn."

Jimmy Sanchez, chief of the ESD's Unemployment Insurance Bureau, said oil workers in Grants, Hobbs and Carlsbad also are running out of unemployment benefits. And he said laid-off molybdenum mine workers in Taos County have mostly seen the last of their unemployment checks. "We just have the 26 weeks of unemployment (benefits per worker) and that's [illegible]," Sanchez said.

New Mexico officials are now applying for so-called "discretionary" funds from the U.S. Department of Labor's $21 million reserve fund.

Pat Newman, a planner with the Governor's Administrative Entity Bureau, said a $2.7 million grant application will be completed in [illegible] weeks. The money, if obtained, would be used for relocation, job searching, on the job training and classroom training.

U.S. Welcomes Gorbachev's Pledge To Talk

WASHINGTON (AP) — The

Profiles Of Candidates

Sunday, November 16, 1986 Farmington (N.M.) Daily Times

Competition for Jobs Frustrates Many

By Rex Graham
Daily Times Staff

An unemployed San Juan County woman stops at the city of Farmington's personnel office every Wednesday. The former maid is looking for a job.

She has lots of company: More than 5,700 San Juan County residents are officially listed as unemployed and looking for work. They are deluging the city's personnel office and local businesses with application forms and resumes.

With San Juan County's official unemployment rate at 16.4 percent, the former maid and many others are learning to deal with defeat in their search for work.

During the six months ended Oct. 31, 1,390 people applied for 41 permanent positions with the city of Farmington. "When you get a job (opening) and 100 people apply for it, you know something is amiss in the community," said Asssitant City Manager Carl Myers.

The city stopped accepting applications Thursday for a $5.30-an-hour warehouse clerk position aft it received 154 applicantions. "Th are just stacked up here on r desk," said Fran Brown, personr administrator for the city of Farr ington. She said only the five t applicants will be selected for interview.

"We have lots and lots of app cants who want to know why th weren't picked for an interview Ms. Brown said. "Some get a litt bit ornery." A few minority app cants grumble that the city biased against them. Some older j hunters suggest that they, too, a being discriminated against.

But most are simply frustrate And personnel specialists say tho feelings of frustration are turning desperation. "They tell you, 'I' been to every place in town I cou think of,' " Ms. Brown said. "Som say 'I'm losing my house,' or have a baby on the way.' "

Gary Borosky, manager Dillard's Department Store i Farmington, said the number people filling out job applications his store has not increased signif cantly since the county's jobles rate jumped from 12.9 percent September 1985 to 16.4 percent th September.

"We have some excellent employ ees," Borosky said, "but it's toug to find good (retail sales) employ ees here because it is an oil-base economy."

Indeed, those with few job skils such as the out-of-work maid, ar almost unemployable. "She's reall broke," Ms. Brown said of the wom an applicant. "She wants anything. Without fail she checks with me" every Wednesday. But the personnel administrator said when a janitorial job becomes available, more experienced and qualified applicants will get priority.

Sally Knowland, personnel technician with the city, said she is shocked at the number of highly qualified job hunters even for entry-level positions. "One (secretary) applicant types 90 words per minute no errors," Ms. Knowland said.

As a result, "The city is getting quality people," said Ms. Brown. "From management on down."

The glut of job applicants is a far cry from the days of San Juan County's oil and gas boom days. "When I applied for my job (more than 7 years ago) we had 17 applicants," Ms. Brown said. "And now we'd have at least 100, and there would be people with a lot more background and experience than I had."

Jean Donahue, employer relations representative for the Employment Security Department in Farmington, said many employers are responding to the current situation by cutting wages or benefits, or both.

Oil workers who have been used to $10-an-hour-or-more wages are finding new jobs, if they can find any, much less rewarding. "People laid off from $35,000- to $40,000-a-year jobs are at their wits end," Ms. Donahue said.

To make matters worse, many oil field and oil-related workers who were laid off in the spring of 1986 are running out of their $154-a-week unemployment compensation benefits. They are taking anything they can find.

The Upswing of Job Applicants at The City of Farmington's Personnel Office

	Full-Time Openings	Applicants
1983	46	1,335
1984	73	1802
1985	67	2376

Joyce Donald, president of the Four Corners Better Business Bureau, said some idle residents are falling prey to advertisements by out-of-state companies that advertise high-paying overseas jobs. Ms. Donald said that one such company advertising locally required a $435 up-front fee.

"Their ads say, 'If you have one year's experience,' " Ms. Donald said, "but often they haven't been in business for one year."

It is easy to see why San Juan County is fertile ground for employment entrepreneurs.

"We're getting 10 people apply for every minimum wage job," said the Employment Security Department's Ms. Donahue. The federally mandated minimum wage is $3.35 an hour.

Ms. Brown said that the city's wage scale has not been reduced because of the glut of workers. But many private firms have gotten used to paying low wages for highly qualified workers.

"The problem is when the economy picks up, their pay structures will be totally skewed," said Ms. Knowland.

But some laid-off oil workers who have found jobs ouside the oil patch may not be eager to go back. Ms. Knowland said one former oil field worker has taken a position at the city animal shelter and another heavy oil equipment operator now works in a $6.31 per hour job with the city.

"They wanted the retirement" benefits, Ms. Knowland said. "Here they know they will get paid every two weeks."

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BLM Gets Chaco Mineral Rights

By Times Staff Writer

SANTA FE — The government says that Anasazi Indian ruins in northwest New Mexico will be saved because the mineral rights to Chaco Canyon will be transferred to the Bureau of Land Management as part of an exchange

ment will give Cerrillos Land Co. 4,890 acres of federal coal rights. The Chaco mineral rights are being donated to the BLM by Cerrillos as part of the exchange.

An analysis of the coal shows that what the government will receive is valued at 12 percent more

ly use the coal or other minerals.

The exchange recently entered a final 45-day public comment period, which will close Dec. 29. Information on the exchange — including the environmental assessment, mineral evaluation and land report — is available

Jewelry Sale

of East Main Street from Herrera Road the exception of a right turn lane at 30th

December 21, 1986

Family Buying Cheaper Gift To Cope With Less Income

By Rex Graham
Daily Times Staff

Last week a young Farmington couple stood at the layaway counter at JC Penney's in Farmington, but they weren't buying gifts.

Doug Bainter, a 25-year-old, second-generation welder, was getting back the $22 installment that he had made on a $120 watch for his wife, Sherrill Bainter. They agreed that the money should go for a less expensive gift.

The man was laid off in July by an oil field service company, and the couple is two months behind on most of their bills.

Hundreds of oil field workers laid off, like the Bainers, in one of the industry's worst years ever, are getting by with less this Christmas.

"I think we've adjusted to the idea," Mrs. Bainter said, standing at her husband's side. "We talked about it, and we decided Christmas isn't just about presents. We have a tree, but nothing under it. But that's OK."

The Bainters, who live on South Monterey, know other familes in worse situations. For them at least, 1987 is going to be better than 1986.

Mrs. Bainter has a private-duty nursing job caring for a Farmington man who was paralyzed seven years ago. And her husband was recently hired by the Rainbow Baking Co. as a route man. He delivers bread, cakes and pastries to restaurants and stores along Scott Avenue in Farmington and similar outlets in Shiprock.

"If Christmas could come three months down the road, we'd do all right," Mrs. Bainter, 23, said. "We would have kept (the watch) on layaway, but I would rather have something under the tree, rather than wait 'til January or February."

After a wave of layoffs swept the oil fields this spring and summer, the Bainters were despondent. Many windows in San Juan County now have holiday greetings, but for job seekers like Bainter have been greeted for months by "Not Accepting Applications" signs.

"For a while he was really down on himself," his wife said. "And in a way, he was losing his self-confidence and wouldn't look for a job." When he did look, she said, "He spent the whole day being turned away.

"We were thinking about moving, but we didn't have any money," she said.

Moving has been a way of life for Bainter. He was born in Missouri in the back seat of a car on the way to a hospital. His father was a welder, and the family grew up in Florida. He and his brothers and sisters all have different birthplaces.

Mrs. Bainter was born in Farmington. Her father died when she was a child. Her mother remarried, though, and she praises her stepfather for insisting that the life insurance money left by her father be spent on her education. The inheritance paid for a private high school education at the Corn Bible Academy in Corn, Okla.

The couple met during a summer vacation and married four years ago. Since then, they moved to where ever Bainter could find welding jobs. She said she felt bad recently when a fellow nurse gave her a Christmas present. "It's strange to get a gift when you can't give one in return," she said. "It's embarrassing."

When her husband became depressed about job hunting, Mrs. Bainter accompanied him and encouraged him to keep going. They often spent eight hours a day applying for work.

"I can't describe the feeling," she said. "Oh, I guess we felt there wasn't any hope. Tired, I guess. We would come home and look at each other. We'd bang on the TV. It was just awful."

The husband was collecting about $150 a week in unemployment compensation, which equaled their mobile home payment and other bills. And Mrs. Bainter's income covered everything else. They got behind on their bills when their car broke down and needed an expensive repair.

Mrs. Bainter was selling cemetery plots this fall but quit because she found it only depressed her more. Later she got the private-duty nursing job for the paralyzed man. "He's trying to cheer me up," she said.

A big break came in November. Bainter was tipped off that Rainbow Bread had one opening. Although it was not advertised, 14 people applied for it.

"We interviewed him a couple times and he kept calling us," recalled Troy Mitchell, one of the company's two Farmington supervisors.

Mitchell said that at first he did not consider Bainter seriously because he had moved from job to job in the past.

Mitchell said the Rainbow Bread job is fairly complicated and his company spends about $3,800 to train new route men.

"We wanted someone who wanted a career and would stay around," Mitchell said.

"He 'checked in' the bread by himself on his second day, and that is something I have never seen in 10 years in the business," Mitchell said. "Yesterday, Goody's restaurant called and congratulated me on what a fine route man we had."

Standing at the layaway counter at Penney's, Bainter said he is looking forward to a big meal with his wife's family on Christmas Day. As

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Specials Good 12/21/86
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6 Pack $1.69
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Business

Early Christmas Sales Sluggish

DEC 13 1986

By Rex Graham
Daily Times Staff

The Grinch may not steal Christmas this year, but retail store managers comparing early December sales with last year's might be saying, "Bah, humbug."

One manager used stronger language than that, but asked not to be quoted.

But most are not surprised. The city of Farmington's gross receipts tax income was off between 12 percent and 15 percent this fall. There were 800 fewer county residents with jobs at the end of October compared to the same time last year, according to the latest state estimate.

The year has been punctuated by layoffs in the oil and gas fields and even one of San Juan County's power plants has cut back. Retail business leaders say a few more layoffs pending at Public Service Company of New Mexico's San Juan Generating Station and at area coal mines are having a certain "chilling effect."

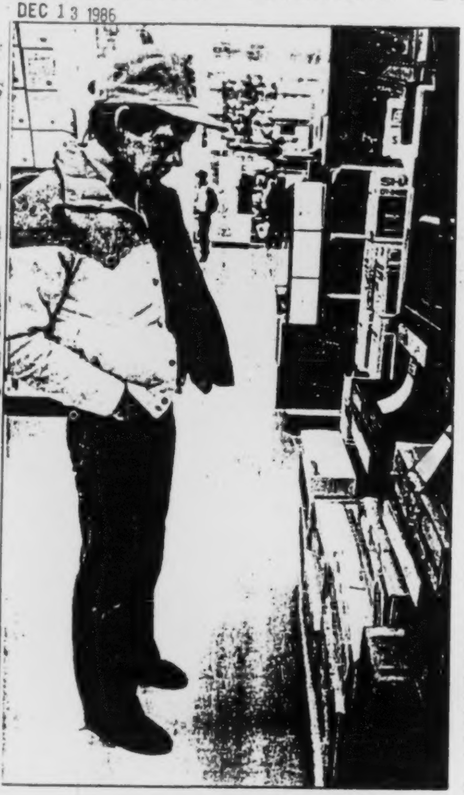
But all may not be lost. Business leaders say the local economy has bottomed out and most people have secure jobs. And a pre-Christmas snow storm, like past storms, could send holiday shoppers into a buying frenzy.

Store managers are nervous nevertheless. They have bulging inventories and wonder if holiday sales will actually end lower or if gift buyers will wait until the last minute.

Mario Armendariz, manager of Blazer Financial Services in Farmington, thinks total spending will be down. "People are holding back — even people who seem to have a good job," said Armendariz. He added that demand for Christmas loans is down about 25 percent from last year.

Farmington Postmaster Helen Kennedy said parcel shipments have languished during December and expects the usual onslaught soon. She said Dec. 19 was the peak day of the post office's parcel business last year and this year's peak may be later.

Lisa Rysanek, a sales clerk in the women's Clubhouse area in Dillard's Department Store, says [illegible]



(Staff Photo by Peggy [illegible])

Pondering

Glen Hunt, Bloomfield, looks at videocassette recorders at Wall-Mart. Again this year, VCRs are hot gift items at department stores and electronic outlets throughout Farmington.

id. "But most of them have bare- started."

Ms. Rysanek and others also say oppers are buying almost exclusively "sale" items.

Dillard's Store Manager Gary Borofsky, said his store is "about even" in Christmas sales totals compared to last year. "I'm thrilled about being even," Borofsky said. "A lot of stores are down." At 80,000 square feet, Dillard's is Farmington's largest department store.

Borofsky said that for all his store's sophisticated computer-tracking abilities of individual purchases, he has not spotted any particular buying trend. He said some shoppers are holding back while others are spending freely.

He said Dillard's is selling lots of everyday necessities such as men's dress shirts, shoes and blue jeans. At the same time, however, the store sold out of its entire stock of $68 gold La'ma women's blouses and $96 black and gold, lamhswool Liz Claiborne sweaters.

"People are looking for a combination of value and fashion," the Dillard's manager said.

Stores are relying on promotions to coax customers into through their doors. Dillard's sold 750 stuffed bears for $10 to customers who had purchased $50 of merchandise. Borofsky said his store ran out of the bears in one day.

Sunwest Bank is giving similar stuffed bears to its new customers. JC Penney's gave away 100 turkeys in one day to customers who purchased at least $100 of merchandise.

Richard "Buzz" Bussell, manager of Penney's, said promotions are becoming more important because consumers are increasingly bargain-conscious. He doesn't expect the trend to fade. "I'm going to spend more money next year" on advertising, he said. "I don't think we'll get our share of the market if we don't. That's the last place to cut — advertising."

"The buyers are out there," said Gary Howlett, vice president and consumer loan officer with First National Bank. "The Christmas buyer has the money right now to buy and is trying to capitalize now rather than on clearance sales later."

Howlett said Wednesday that he himself has not done the bulk of his gift buying. Asked if he was going to splurge, he said, "I'm hoping not to, but as usual it always turns out to be more than I planned on."

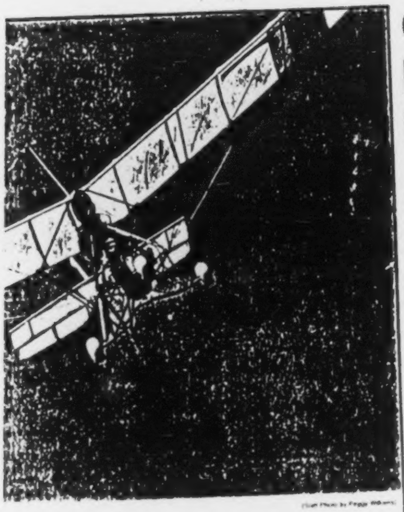
We Cover The San Juan Basin

AILY TIMES

FARMINGTON : NEW MEXICO

Basketball [illegible] Page B1

Jan. 7, 1987



Staff Photo by Peggy Williams

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254 pounds including a 5-gallon fuel limit. The airplane can be disassembled by two people within an hour for travel. Ratcliff frequently flies on weekends.

Oil Price Rise Boosts Spirits, But Little Else

By Rex Graham
Daily Times Staff

A recent 20 percent rise in oil prices to $18 a barrel has lifted the spirits of Farmington's oil and gas producers, but they say any drilling boom here is a long way off.

"I'm feeling so good I went and ate three meals one day last week," said Farmington independent Robert Bayless. "We're probably still losing money, but not as much as five months ago." He was referring to the 1986 low price of $8 a barrel.

"There is no confidence in the industry as far as price stability," Bayless continued. "And the natural gas market has not improved a bit."

The fortunes of oil field equipment and service companies as well as the San Juan County economy are tied to exploration spending by Bayless, Merrion, Amoco Production Co., Meridian Oil Co., Union Texas Petroleum and others.

Despite the recent rise in oil prices, the number of drilling rigs operating on Dec. 29 in New Mexico was 34, which was down from 76 a year earlier, according to the Hughes Tool Co.

A year ago, a 42-gallon barrel of oil was selling for about $24, down from a 1985 high of about $30. Nationwide, 988 rigs were operating on Dec. 29, down from 1,890 on Dec. 30, 1985.

Crude prices, and drilling, are down in response to boosts in production by feuding OPEC members. Analysts say the most recent crude price rise is due to an OPEC agreement to cut production by about 7 percent.

Gregory Merrion, president of Merrion Oil & Gas Corp. in Farmington, said drilling was as active as it was in December due more to year-end tax considerations than OPEC pronouncements.

Merrion said it costs him $17 to produce one barrel of oil and the price at the local wellheads is $2.50 lower than the $18 posted price at Cushing, Okla., oil terminals.

"I anticipate the first quarter of '87 will be really slow," Merrion said today.

The lack of enthusiasm was in evidence on Monday at the Farmington Employment Security Department office.

"We took almost 100 (new) unemployment claims yesterday and almost that today," said Orville Smith, supervisor of the Claims Department, on Tuesday.

New unemployment claims had averaged 183 per week in December, and Smith said the numbers were high this week because Arizona Public Service Co. laid off a number of temporary workers. But he said many standing in line at his office this week were from Arapahoe Drilling Co., Walters Drilling Inc., Navajo Oil Field Service, Four Corners Drilling Co. and Exeter Drilling.

Tobie Hall, financial coordinator for Four Corners Drilling, agreed with Bayless and Merrion that the price of oil must go higher and stabilize before drilling floor hands and roughnecks are called back.

Of the recent oil-price rise, Hall said, "There is definitely light at the end of the tunnel, but the [illegible] is how long is the tunnel? I'd like to be optimistic on the short term but I can't see any reason to be."

An oil import fee to be debated by the 100th Congress would immediately brighten the outlook if it was enacted, but oil producers aren't counting on it.

Merrion, who has his doubts about how much he would benefit from such a tariff, claimed that Easterners like to see the oil industry suffer.

"They have no love and compassion for oil men," Merrion said. "They think we have it too easy and we don't deserve it. ... But we haven't had it too easy.

"You have to look at what's good for the country," he said. "Should we have a domestic oil industry?"

o Consider Budget Plan

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But Sen. Lawton Chiles, D-Fla., disputed the administration's calculations, claiming that the measures proposed in the new budget would fall far short of the $108 billion deficit level for 1988 that is specified in the Gramm-Rudman budget balancing law.

"We can't lose sight of the fact that some gymnastics with the arithmetic to reach this year's target won't help much if we don't reach our ultimate goal," Chiles told Miller.

And Chiles said some of the "new revenues" proposed by the administration would be an unfair burden on certain Americans.

For instance, Chiles said that proposed user fees for Federal Housing Administration (FHA) mortgage loans could cost the typical new homebuyer $1,600 more in out-of-pocket money at down-payment time.

Miller told the panel that the administration wanted its proposals to be taken seriously.

"We in the administration want to work with you. We believe, however, that in turn members of Congress should evaluate the president's proposals on their merits rather than criticizing the budget, as some have done, even before the ink is dry," Miller said.

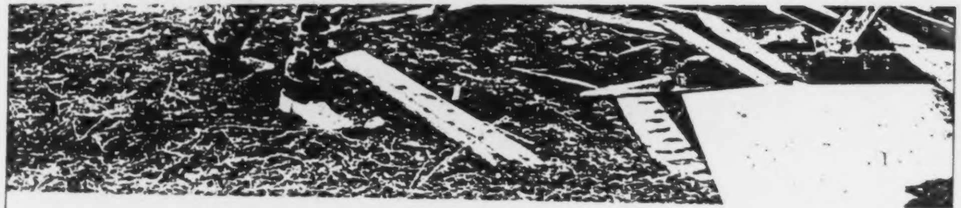
Sen. Pete V. Domenici, R-N.M., who was chairman of the budget panel before the recent Democratic recapture of the Senate, said the Reagan budget was a serious effort to trim the deficit and not "blue smoke and mirrors" as some have suggested in the past.

"You can't get there without some pain. Anybody who thinks you can, you can't," Domenici said.

On Tuesday, in a largely symbolic vote, the House rejected 240-175 a GOP move to bar any tax increase over the next two years.

Houston, Aragon Agree To 'Share' State Senate Post

ALBUQUERQUE (AP) — An un[illegible] deal has been [illegible] senators who have pledged their support, saying that some had re



Staff Photo by Peggy Williams

Wind Damage

A shed owned by Darren Woodson, 4610 Linda Lane, was blown apart by high winds Monday morning. Winds carried the roof 30 to 40 feet before it landed in a field near Woodson's home. Woodson tries to move a rafter to check the damage to his aluminum canoe crushed beneath the debris.

Jan. 6, 1987

Oil Equipment Firms Announce Merger

By Rex Graham
Daily Times Staff

Battered by the petroleum industry's steep year-long downturn, two Farmington oil equipment companies today announced that they have merged. The new venture, U.S. Enertek Inc., was formed by the acquisition of the assets and liabilities of American Tank & Steel Corp. and the production equipment unit of Weatherford U.S. Inc., which was formerly Olman Heath Co.

Terms of the merger were not given, although an announcement said the two companies would be combined "to integrate and streamline operations to develop new product lines both inside and outside the energy industry."

Bobby Weatherly, president and chairman of the new company, was formerly division senior vice president of Weatherford's oilfield service operations in the United States, Mexico and South America.

Weatherly said in a statement that U.S. Enertek will be run through two divisions and will be composed of the existing management of the former Olman Heath Co. and American Tank & Steel. Olman Heath was acquired by Weatherford several years ago.

Rodney Heath, founder of Olman Heath and a Weatherford vice president, will be president of the Production Equipment Division. Mike Kemper, formerly president of American Tank, is president of the Industrial Technologies Division of U.S. Enertek.

Heath is optimistic that a slump in the oil field equipment industry is over.

"The potential is just around the corner for significant improvement in natural gas drilling and competition," Heath said. "Under Weatherford, we doubled the engineering staff and put considerable effort and investment into the development of new technology.

"Enertek is now well positioned to serve our customers when the upturn comes," Heath said. He believes drilling activity will increase in Enertek's markets later this year or by early 1988.

American Tank and Steel, which had been a strong local competitor with Weatherford, will specialize in computer-controlled radio telemetry monitoring equipment for oil and gas wells. The new Industrial Technologies Division will produce and market the equipment and software under the Xytec brand name. The division also will continue its steel service center and custom metal fabrication.

The Farmington City Council in December helped pave the way for the sale. The council reassigned more than $3 million of industrial development revenue bonds from Weatherford U.S. Inc. to U.S. Inertek at Heath's request. The city originally approved $3.4 million of 9 percent bonds to Olman Heath in order for the company to expand and offer more jobs to area workers. The bonds were later reassigned to Weatherford.

Stock Mart Surges to Record 1,971.32

N.Y. Times News Service

NEW YORK — So far, Wall Street loves 1987. The stock market had one of the best days in its history on Monday as the Dow Jones industrial average soared to a record level that is within reach of the vaunted 2,000 mark. "Today is amazing!" said Jack Baker, head trader for Shearson Lehman Brothers, as he tried to catch his breath at the end of a hectic day that saw the closely

(Related Story Page 3)

business days since 1986 became history, the blue-chip average of 30 stocks is up nearly 4 percent.

Market experts think the turning of the calendar may very well have had a major effect on Wall Street, especially since investors are now working under a new set of tax laws.

stock market rose on Jan. 1, compelling many investors to cash in before then.

This phenomenon, Wall Street experts say, weakened the stock market at least during December, and perhaps even earlier. It created a pent-up demand for equities that could not be satisfied until last Friday, with the new law in place.

"You created a false sense of

previous record single-day gain of 43.41 points, set on Nov. 3, 1982, the day after that year's congressional elections. That 43.41-point improvement, with the Dow then at just 1,065, represented a 4.2 percent increase.

While blue-chip stocks got a large amount of attention from investors yesterday, the rest of the market did not suffer from neglect. The

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it."

Dole said the administration [illegible] served credit for its effort, but he added, "to reach their numbers, they probably used some smoke and mirrors just as Congress does from time to time."

"We ought to stop the rain dance about all the little figures in the budget, and move on in, see what we can do and do it as quickly as we can," Dole said.

"The administration wants to work with Congress. We want Congress to take us seriously," Budget Director James C. Miller III said as Reagan's new budget, calling for further increases in defense spending and another round of deep cuts in domestic programs, was delivered to lawmakers Monday.

"I'm tired of hearing statements that the budget is dead on arrival," Miller added. "The budget will be dead on arrival only if somebody on Capitol Hill kills it. It was alive when it left our quarters."

The budget calls for sharp cuts in many favorite Reagan targets: food stamps, student loans, housing and mass transit programs.

It proposes cutting in half over the next five years farm subsidy programs while increasing defense spending annually at about 3 percent on top of inflation over the same period.

To generate additional revenue, it relies heavily on sales of federal assets and loans, and calls for user fees for many federal services.

While the chief emphasis in the new budget proposal is on deficit

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Officials Say Engineer Ra

CHASE, Md. (AP) — Crews worked today
an Amtrak train plowed into three Conrail fr
run a stop signal, killing 15 people and injur
said.

The Conrail engineer saw the signal — w
three hours — and braked, but didn't have
with the passenger train, which was travel
said.

Rescue workers on Monday finished searc
to a fraction of its original height and called c
cars mangled in the worst wreck in Amtrak's

Reagan Submits Catastrophic Care Plan

WASHINGTON (AP) — President Reagan today proposed that Congress "give Americans that last full measure of security" by providing catastrophic health care for the elderly through Social Security.

The plan essentially would provide catastrophic health care coverage under Medicare, while limiting out-of-pocket expenses to $2,000.

Reagan's decision, which spokesman Marlin Fitzwater said "was made this morning," represented a victory for Health and Human Services Secretary Otis Bowen, whose catastrophic health care proposal essentially was embraced following a lengthy debate within the administration.

The coverage would cost Medicare beneficiaries an additional $4.92 a month, or $59 a year.

Reagan, in a statement, said:

"I am asking Congress to give Americans that last full measure of security, to provide a health insurance plan that fights the fear of catastrophic illness."

"We all know family, friends or neighbors who have suffered a devastating illness that has destroyed their financial security," Reagan said. "As medical science has given us longer lives, we must face the new challenges to ensure that the elderly have security in their old age.

"For too long, many of our senior citizens have been faced with making an intolerable choice — a choice between bankruptcy and death. This proposed legislation would go a long way to help solve that dilemma."

Fitzwater, who read Reagan's statement to reporters, said the proposal "has been discussed from every perspective."

Reagan had received a memorandum last weekend from his Domestic Policy Council that contained options for providing catastrophic health care, Fitzwater said.

The president, in his State of the Union address last month, said he wanted to see "how the private sector and government can work together" to limit Medicare recipients' out-of-pocket expenses.

A fact sheet released by the White House said the proposal envisions providing catastrophic health care coverage to some 30 million elderly.

Navy Secretary To Resign

WASHINGTON (AP) — Navy Secretary John F. Lehman Jr., the hands-on executive who oversaw a big peacetime buildup of the fleet, has decided to resign his post later this year, the Pentagon said today.

Robert Sims, the Pentagon's chief spokesman, said the 44-year-old Lehman informed Defense Secretary Caspar W. Weinberger of his decision during a private meeting last week.

Sims said he did not believe Lehman had yet set a date for his return to private life.

Presidents Day Observances Differ

Monday is a federal holiday, and all offices of the United States Government will be closed. Other public offices have differing schedules.

Washington's Birthday and Lincoln's Birthday have long been observed, but in 1971 they became Presidents' Day, to be observed on the third Monday of February.

City of Farmington employees will have a holiday, and the Farmington Public Library will be closed. All post offices will be closed, making no mail deliveries except to box holders. Financial institutions will not be open.

Governments operating as usual Monday will include public schools in the county; city offices in Aztec and Bloomfield; New Mexico State offices, and San Juan County offices.

The Daily Times will publish as usual.

2/12-1987

Drilling Rigs Sit Silent Around San Juan Basin

By Rex Graham
Daily Times Staff

One month after a cold snap made Albuquerque shiver, and one month after Gas Company of New Mexico scrambled to turn on every gas well it had available to it, a strange lethargy has spread over the San Juan Basin gas fields of northwest New Mexico.

As of Sunday night, no drilling rigs were probing the basin's underground sandstone formations. Producers are not looking for gas to replace what is being sold.

"I've been here since 1971, and I don't ever remember no rigs being out," said Larry Willinger, Farmington district manager for Halliburton Service Co., an oil field service company.

"I've been in the basin for 30 years, and it's never happened before," said Lew Andrews, president of Oilfield Products.

The San Juan Basin has about 18,000 producing gas wells, and more than a dozen drilling rigs have been active at any moment replacing old, low-producing wells as they were shut in.

For all of New Mexico, Hughes Tool Co. reported that 24 rigs were active on Monday, but most were in southeastern New Mexico Hughes Tool said New Mexico's rig count was 38 a month ago and 52 a year ago.

February is usually a slow month for drilling because oil field roads in remote areas thaw and are hard for heavy drilling rigs to negotiate. But producers say low petroleum prices, rather than thawing temperatures, are responsible for keeping them indoors.

Frank Chavez, district supervisor for the state Oil Conservation Division in Aztec, said the situation spells future trouble for consumers.

"It takes all the wells we've got to supply gas during the peak-demand periods," Chavez said. "And we are not replacing them. It should signal that we've got a problem some where."

Producers agree, and the signal of no rigs working indicates trouble for them now.

"Some of the old-timers around here say it has been in excess of 30 years since there was no rigs working in the basin," said Doug Endsley, a geologist for Merrion Oil and Gas Corp. in Farmington. "It means we're all looking out for our jobs, and hopefully, it will reverse itself soon."

Halliburton's Willinger said he has heard talk about more drilling this year than last year, but he is not looking for a substantial increase.

Willinger said his company has 28 employees in Farmington. A year ago it had 256 on the payroll. "When you sit here and (lay off) good employees with four or five years of experience, a wife, kids and a home, it is the hardest thing I have ever done. And it's not their fault — it's just a matter of economics."

Al Kuchera, president of Hixon Development Co. in Farmington, said his company will drill five or six wells in the San Juan Basin this year. "We'll spud (start) a well here in a couple weeks, so we'll break the trend," he said. "I'm hoping by the end of this year things will look a lot better.

"We're pretty active in Kansas and Oklahoma," Kuchera continued, "because we're hitting bigger-volume (oil) wells up there."

About 30 percent of Hixon Development's revenue comes from crude oil sales and the remainder from natural gas. Kuchera said oil prices have recovered better than gas, and the gas-rich San Juan Basin has suffered as a result.

Merrion Oil's Endsley and others say that the proven reserves of natural gas are declining. At the same time, however, Merrion is getting between $1.35 and $1.45 per thousand cubic feet of gas now, compared to $2.50 to $2.75 a year ago.

Producers predict that gas prices will rebound, possibly to much higher levels that during the past.

"If you can just stand back and look at it, we just go around in circles," said Robert Bayless, an independent producer based in Farmington. Repeating a familiar refrain, Bayless said this country's energy policy almost insures a continuing boom-bust cycle in his industry.

"People in Washington absolutely have their heads ... somewhere," Bayless said.

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FASHIONS
to win your Heart
Mary Murfin's
Skyliner Galley Friday Noon

KRWN-FM 93 Presents
DANCE TO THE 50's
at The Animas Valley Mall
Saturday, Feb. 14th,
7:00 P.M. Until Midnight

ALAN CHARLES DESIGNS
SHOWROOM CLEARANCE SALE
Save on all Dining Room • Living Room • Bedroom Furniture • Now thru Feb. 15 • 10 Year Warranty • 90 Days FREE Financing • Layaway •
½ Mi. East of Flora Vista PO
Farmington - Aztec Hwy. 550
334-6137 Mon.-Sat. 10 AM-5:30

EXHIBIT "4"

NAME OF COMPANY	[illegible] IN CURRENT CASH FLOW	ADDITIONS TO WORKING CAPITAL AND DEBT PAYOFF	IN WORKING CAPITAL	COMMENTS ON DEBT BURDEN
ALAMCO INC	SMALL NEGATIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
ALBION INTERNATIONAL	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	JUST NEGOTIATED OUT OF DEBT
ALEXANDER ENERGY COR	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
ALTA ENERGY CORP	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
ALTEX OIL CORP	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	NO CASH FLOW BEFORE INTEREST
AMCOLE ENERGY CORP	SMALL NEGATIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
AMERICAN NATIONAL PE	GOOD POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	FAIR MANAGEABLE DEBT LOAD
ARAPAHO PETROLEUM IN	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
ASPEN EXPLORATION CO	WEAK POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
BARNWELL INDUSTRIES	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
BARRETT RESOURCES CO	FAIR POSITIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	TIGHT WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
BARUCH FOSTER	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	ADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
BASIC EARTH SCIENCE	STRONG POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
BAYOU RESOURCES INC	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DIFFICULT DEBT LOAD
BELCOR INC	MAJOR NEGATIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	LIQUID	NO CASH FLOW BEFORE INTEREST
BELDEN & BLAKE	FAIR POSITIVE CASH FLOW	SIGNIFICANT DECLINE IN WORKING C	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
BELLWETHER EXPLORATI	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
BIG PINEY OIL & GAS	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
BLACKGOLD ENERGY RES	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
BOGERT OIL COMPANY	STRONG POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	TIGHT WORKING CAPITAL	GOOD-VERY SMALL DEBT LOAD
BOLYARD OIL & GAS LT	SMALL NEGATIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	LIQUID	GOOD CONDITION- NO DEBT
BROCK EXPLORATION CO	STRONG POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
BROWN (TOM)	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
BURKHART PETROLEUM C	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
CALLON PETROLEUM CO	SMALL NEGATIVE CASH FLOW	PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
CASTLE ENERGY	NEGATIVE CASH FLOW A WORRY	SIGNIFICANT WORKING CAPITAL DECL	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
CENTENNIAL PETROLEU	STRONG POSITIVE CASH FLOW	PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DIFFICULT DEBT LOAD
CHAPARRAL RESOURCES	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	LIQUID	GOOD-VERY SMALL DEBT LOAD
CHAPMAN ENERGY INC	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
CHEYENNE RESOURCES I	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	NO CASH FLOW BEFORE INTEREST
COBB RESOURCES CORP	GOOD POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	TIGHT WORKING CAPITAL	GOOD-VERY SMALL DEBT LOAD
COLUMBINE EXPLORATIO	FAIR POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
COM TEA RESOURCES IN	SMALL NEGATIVE CASH FLOW	ADDING TO WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
COMANCHE OIL EXPLORA	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
CONS ENERGY PARTNERS	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	GOOD CONDITION-SMALL DEBT
CONSOLIDATED OIL&GAS	WEAK POSITIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
CONVEST ENERGY CORPO	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	TIGHT WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
CONVEST ENERGY PARTN	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
CREDO PETROLEUM CORP	GOOD POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD CONDITION- NO DEBT
CRESCENT OIL&GAS	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	LIQUID	GOOD CONDITION- NO DEBT
DALLAS OIL&MINERALS	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
DEVON RESOURCE INVES	GOOD POSITIVE CASH FLOW	SIGNIFICANT DECLINE IN WORKING C	INADEQUATE WORKING CAPITAL	GOOD CONDITION-SMALL DEBT
DIETRICH RESOURCES C	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	NO CASH FLOW BEFORE INTEREST
DISCOVERY OIL LTD	NEGATIVE CASH FLOW A WORRY	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
DORCHESTER HUGOTON	EXCELLENT POSITIVE CASH FL	SIGNIFICANT DECLINE IN WORKING C	ADEQUATE WORKING CAPITAL	GOOD CONDITION-VERY MINOR DEBT
DOUBLE EAGLE PETROLE	NEGATIVE CASH FLOW A WORRY	MINOR PAYING OFF DEBT	LIQUID	NO CASH FLOW BEFORE INTEREST
EAGLE EXPLORATION CO	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
EMC ENERGIES INC	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT.	ADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
ENERGY DEVELOPMENT P	EXCELLENT POSITIVE CASH FL	DECLINING WORKING CAPITAL	ADEQUATE WORKING CAPITAL	GOOD CONDITION-VERY MINOR DEBT
ENERGY RESOURCES OF	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	NO CASH FLOW BEFORE INTEREST
ENERGY VENTURES INC	STRONG POSITIVE CASH FLOW	ADDING TO WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
ENEX RESOURCES CORP	WEAK POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
ENSOURCE INC	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DIFFICULT DEBT LOAD
EQUITY OIL COMPANY	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
EVERGREEN RESOURCES	SMALL NEGATIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
FEDERATED NATURAL RE	GOOD POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
FOUNTAIN OIL&GAS	STRONG POSITIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	INADEQUATE WORKING CAPITAL	GOOD-VERY SMALL DEBT LOAD
GALAXY OIL COMPANY	SMALL NEGATIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
GEO RESOURCES INC	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
GLOBAL NATURAL RESOU	STRONG POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
GOLDEN OIL COMPANY	FAIR POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DIFFICULT DEBT LOAD
GREAT AMER RESOURCE	MAJOR NEGATIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	NO CASH FLOW BEFORE INTEREST
GREAT AMERICAN PARTN	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	GOOD CONDITION-SMALL DEBT
GREAT EASTERN ENERGY	MAJOR NEGATIVE CASH FLOW	PAYING OFF DEBT	VERY LIQUID	NO CASH FLOW BEFORE INTEREST
GREENWOOD RESOURCES	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
HARKEN OIL & GAS INC	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	LIQUID	FAIR-MANAGEABLE DEBT LOAD
HERSHEY OIL CORP	GOOD POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	LIQUID	GOOD CONDITION- NO DEBT
HIGH PLAINS OIL CORP	GOOD POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	TIGHT WORKING CAPITAL	GOOD-VERY SMALL DEBT LOAD
HOUSTON OIL FIELDS C	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DIFFICULT DEBT LOAD
INTERCONTINENTAL ENE	MAJOR NEGATIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	TIGHT WORKING CAPITAL	NO CASH FLOW BEFORE INTEREST
KEE EXPLORATION	SMALL NEGATIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
KELDON OIL CO	SMALL NEGATIVE CASH FLOW	PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
KELLEY OIL&GAS PARTN	EXCELLENT POSITIVE CASH FL	NO COMMENT		
KIMBARK INC(NEW)	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	TIGHT WORKING CAPITAL	GOOD CONDITION-SMALL DEBT
KRM PETROLEUM	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
LOMAK PETROLEUM INC	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
LOVE OIL COMPANY INC	MAJOR NEGATIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	TIGHT WORKING CAPITAL	DEBT LOAD IS A PROBLEM
LYNX EXPLORATION COM	SMALL NEGATIVE CASH FLOW	MINOR PAYING OFF DEBT	VERY LIQUID	GOOD CONDITION- NO DEBT
MAY ENERGY PARTNERS	GOOD POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	ADEQUATE WORKING CAPITAL	DEBT LOAD IS A PROBLEM
MAY PETROLEUM INC	GOOD POSITIVE CASH FLOW	MAJOR INCREASE IN WORKING CAPITA	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
MAYNARD OIL COMPANY	FAIR POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	ADEQUATE WORKING CAPITAL	GOOD CONDITION-SMALL DEBT
MCFARLAND ENERGY INC	EXCELLENT POSITIVE CASH FL	MINOR INCREASE OF WORKING CAPITA	LIQUID	GOOD CONDITION-SMALL DEBT
MIDWEST EXPLORATION	NEGATIVE CASH FLOW A WORRY	SIGNIFICANT DECLINE IN WORKING C	VERY LIQUID	GOOD CONDITION-VERY MINOR DEBT
MONOGRAM OIL&GAS INC	FAIR POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF TO PAY INTERE
MSR EXPLORATION LTD	FAIR POSITIVE CASH FLOW	MAJOR INCREASE IN WORKING CAPITA	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
NAHAMA&WEAGANT	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	LIQUID	GOOD CONDITION NO DEBT
NEWHALL RESOURCES	EXCELLENT POSITIVE CASH FL	MAJOR INCREASE IN WORKING CAPITA	ADEQUATE WORKING CAPITAL	GOOD CONDITION NO DEBT
NORRIS OIL CO	JUST ANNOUNCED MERGER SHOULD RELIEVE CASH FLOW & DEBT PROBLEMS		LIQUID	GOOD CONDITION NO DEBT
NUGGET OIL CORPORATI	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	
OAKRIDGE ENERGY INC	FAIR POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	TIGHT WORKING CAPITAL	CASH FLOW NOT ENUF TO PAY INTERE
OCEANIC EXPLORATION	EXCELLENT POSITIVE CASH FL	MINOR INCREASE OF WORKING CAPITA	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
OIL SECURITIES INC	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
PANGEA PETROLEUM COMPAN	JUST ANNOUNCED MERGER LOOKS POSITIVE BUT MUST WAIT FOR FINAL AGREEMENT		TIGHT WORKING CAPITAL	CASH FLOW NOT ENUF TO PAY INTERE
PATRICK PETROLEUM CO	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	FAIR-MANAGEABLE DEBT LOAD
PAISLEY PETROLEUM INC	STRONG POSITIVE CASH FLOW	ADDING TO WORKING CAPITAL	ADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
PETROL INDUSTRIES IN	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
PETROLEUM DEVELOPMEN	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
PETROLEUM INVESTMENT	EXCELLENT POSITIVE CASH FL	MINOR INCREASE OF WORKING CAPITA	INADEQUATE WORKING CAPITAL	GOOD CONDITION-SMALL DEBT
PETROMARKTINE LOVELA	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	TIGHT WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
PETROMINERALS CORPOR	STRONG POSITIVE CASH FLOW	ADDING TO WORKING CAPITAL	ADEQUATE WORKING CAPITAL	GOOD-VERY SMALL DEBT LOAD
PETROTECH INC	WEAK POSITIVE CASH FLOW	PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
PETE PETROLEUM CORP	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	DEBT LOAD IS A PROBLEM
PLAINS PETROLEUM	STRONG POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD CONDITION- NO DEBT
PLAINS RESOURCES INC	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
PLANO PETROLEUM CORP	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
PLEXUS RESOURCES COR	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	LIQUID	DEBT LOAD IS A PROBLEM
PREMIER RESOURCES LT	WEAK POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
PRESIDIO OIL COMPANY	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
PRIMA ENERGY CORP	GOOD POSITIVE CASH FLOW	ADDING TO WORKING CAPITAL	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
PYRAMID OIL COMPANY	FAIR POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD CONDITION- NO DEBT
QED EXPLORATION INC	STRONG POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD CONDITION- NO DEBT
QUESTA ENERGY	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	FAIR-MANAGEABLE DEBT LOAD
REGAL PETROLEUM	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
RESOURCE EXPLORATION	GOOD POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	DEBT LOAD IS A PROBLEM
ROYAL RESOURCES CORP	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD-VERY SMALL DEBT LOAD
SAGE ENERGY CO	FAIR POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	LIQUID	DIFFICULT DEBT LOAD
SAMSON ENERGY COMPAN	EXCELLENT POSITIVE CASH FL	SIGNIFICANT DECLINE IN WORKING C	TIGHT WORKING CAPITAL	GOOD CONDITION-VERY MINOR DEBT
SAXON OIL COMPANY	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	DIFFICULT DEBT LOAD
SAXON OIL DEVELOPMEN	EXCELLENT POSITIVE CASH FL	NO COMMENT	INADEQUATE WORKING CAPITAL	GOOD CONDITION-SMALL DEBT
SEAHAWK OIL INTERNAT	SMALL NEGATIVE CASH FLOW	MINOR PAYING OFF DEBT	VERY LIQUID	DEBT LOAD IS A PROBLEM
SEARCH NATURAL RESOU	MAJOR NEGATIVE CASH FLOW	PAYING OFF DEBT	VERY LIQUID	NO CASH FLOW BEFORE INTEREST
SHEFFIELD EXPLORATIO	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
SNYDER OIL PARTNERS	SMALL NEGATIVE CASH FLOW	NO COMMENT	LIQUID	NEGATIVE CASH FLOW BEFORE PAYING
SOUTHLAND ENERGY COR	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	NO CASH FLOW BEFORE INTEREST
STRATA CORP	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	NO CASH FLOW BEFORE INTEREST
STRIKER PETROLEUM CO	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
SUMMIT ENERGY INC	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	TIGHT WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
SUNBELT EXPLORATION	FAIR POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DIFFICULT DEBT LOAD
SWIFT ENERGY CO	GOOD POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	LIQUID	GOOD CONDITION- NO DEBT
TEMPLETON ENERGY INC	SMALL NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
TEXON ENERGY CORP	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	NO CASH FLOW BEFORE INTEREST
TIPPERARY CORPORATIO	GOOD POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM
TORLAN OIL CORP	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	TIGHT WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
TPEX EXPLORATION	STRONG POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	TIGHT WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
TRI-VALLEY OIL&GAS	FAIR POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	TIGHT WORKING CAPITAL	JUST PAID OFF DEBT
TYREX OIL COMPANY	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
UBENCO INC	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	ADEQUATE WORKING CAPITAL	DEBT LOAD IS A PROBLEM
VALEX PETROLEUM INC	FAIR POSITIVE CASH FLOW	SIGNIFICANT WORKING CAPITAL DECL	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
WAINOCO OIL CORP	GOOD POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
WALKER ENERGY PARTNE	FAIR POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	FAIR-MANAGEABLE DEBT LOAD
WEPCO ENERGY CO	FAIR POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DEBT LOAD COULD CAUSE PROBLEMS
WESTERN ENERGY DEVEL	NEGATIVE CASH FLOW A WORRY	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
WESTERN ENERGY RESOU	NEGATIVE CASH FLOW A WORRY	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD CONDITION- NO DEBT
WHITING PETROLEUM CO	FAIR POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD CONDITION- NO DEBT
WICHITA INDUSTRIES	NEGATIVE CASH FLOW A WORRY	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	CASH FLOW NOT ENUF PAY INTEREST
WILSHIRE OIL OF TEXA	GOOD POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	TIGHT WORKING CAPITAL	DIFFICULT DEBT LOAD
WIMCO PETROLEUM	MAJOR NEGATIVE CASH FLOW	DECLINING WORKING CAPITAL	VERY LIQUID	GOOD CONDITION- NO DEBT
WISER OIL CO	GOOD POSITIVE CASH FLOW	MINOR INCREASE OF WORKING CAPITA	VERY LIQUID	GOOD CONDITION- NO DEBT
WOODBINE PETROLEUM	GOOD POSITIVE CASH FLOW	MINOR PAYING OFF DEBT	INADEQUATE WORKING CAPITAL	DIFFICULT DEBT LOAD
WYOMING OIL&MINERALS	WEAK POSITIVE CASH FLOW	DECLINING WORKING CAPITAL	INADEQUATE WORKING CAPITAL	DEBT SIGNIFICANT PROBLEM

Senator **Bingaman**. Thank you very much. Pete, did you have a question?

Senator **Domenici**. Just maybe one. We have heard at a number of hearings that the various Federal regulatory agencies, from the comptroller on down to the FDIC and others, are perhaps not considerate enough of your relationship with independent drillers and/or people involved in the industry to give you time enough to liquidate—carry them, but are rather forcing that the debts be written off more abruptly than the practical person in the field, like yourself and your bankers, would like to see done to give this industry a chance to breathe. Do you have any general or specific thoughts on that subject?

Mr. **Ledbetter**. Yes, I do, Senator. My last in-house examination I was asked by a bank examiner how many loans—what percentage of our loans in our bank was related to the oil and gas industry; and my reply to him was all of them, because it does have a domino effect in a community that has a lot of oil and gas industry. The regulations so stipulate that any bank that has 25 percent of their loans in—direct loans to the oil and gas industry is to be—is depicted as an energy bank and they have special call reports; and we submit these on a quarterly basis, which outlines the number of loans that we have.

Just the report itself is very definitely self-defeating for the oil and gas industry, because if you're looking at this report the loans that you have, even though they are performing loans, you have a tendency to try to bring these percentages down so you do not have this concentration of the debt. I also strongly suspect that a lot of the bank failures today are somewhat related to the banks that failed back in the 1930's in the depression days. There were some good banks in those years, Senators, that were closed because of the economic times.

The banks did not—were not given the opportunity to work themselves out of their problems, and the regulators simply closed them down. So that would be my response to your question.

Senator **Bingaman**. Thank you very much. I appreciate that testimony. Our next witness is Sylvia Little, who is going to testify with regard to the views of the spot marketers. She has been a partner with her husband in an independent gas producing business in Farmington for nine years, a member of the Independent Producers Association of New Mexico, and a member of the Four Corners Gas Producers. She's currently coordinating spot market bids for nine local producers. We're glad to have you here.

STATEMENT OF SYLVIA LITTLE

Ms. **Little**. Thank you, Mr. Chairman, Senator Domenici. Of course, you both know that right now you are sitting over one of the largest natural gas fields in our country. The San Juan Basin contains trillions of cubic feet of gas, and it does make one wonder why all of our drilling rigs are lying idle in their yards. We know that's why you're here, and we sincerely appreciate your interest.

Much of the drilling in this area of New Mexico has been done by the independent producing companies. Probably 80 percent of the wells in the San Juan Basin are gas wells rather than oil wells.

I've been told that the BTU heating equivalent of oil at the current rate of $16 per barrel would be about $2.58 per MCF of natural gas. And from our experience in the last few weeks we feel very lucky to sell natural gas at 1.58 per MCF. At this price the small independent producer cannot feel encouraged to continue drilling for gas.

And trying to market our own gas can be very discouraging, especially on the spot market. Before the first of each month, we must make a bid—a blind bid, mind you— to an end-user of natural gas, such as a public utility or manufacturer or refinery. If we bid too high and miss the call we won't be able to sell anything for at least a month, and we'll have to shut in the wells. This not only jeopardizes the future strength and durability of the wells, but negates the cash flow for a substantial period of time.

If our bid is accepted, our spot-market customer calls daily for the gas. The producer still never knows from one day to the next whether he will be selling his gas or whether he'll have to send his field man out to turn off the producing wells, maybe for a day or two or maybe for weeks.

During the winter months, of course, gas is more in demand, but still without a consistent market. And what happens during the summer months when the wells are more likely to be shut in? Our company lost three stripper gas wells last summer because they were shut in for so long that they'll never produce again.

Our market area, as you've been told, is California; but we also have some of Arizona and most of Nevada. The end-users of our market area will not accept delivery of amounts of gas as small as our companies individually produce, which forces us into cooperative efforts with other independent producers to market the gas. Such community efforts could subject us to violation of Federal laws relating to price-fixing, even though the amount of gas involved might be a very small percentage of this area's production. Defending such an allegation would be too costly for the small producer.

An alternative to co-op marketing would be to hire the local industry's new middleman, the broker, who usually takes about 3 percent of the market value for his services. The independent producer can't pass through this cost to anyone. The middleman now makes the profit that a producer could use for drilling.

The traditional gas brokers in this area were the companies who have built the pipelines right up to the wellhead in order to buy the gas and resell it. If they had a contract to buy gas in that area, they installed all the necessary equipment to meter and deliver the gas into their pipeline.

This same pipeline has now been declared a transporter, no longer to buy and sell gas. Who's going to build the pipelines now? Every day we must tell the pipeline how much gas our wells are putting into their pipeline and what percentage of the gas from each well is going to which end-user. It's like an airline reservation, the pipeline has so much room and they can't afford to overbook nor underbook.

The pipeline as a transporter has the authority to penalize us by fines of two or three times the value of the gas for not reporting this information correctly. This is not only a very cumbersome demand; but if a small producer has only one man in the field, it can also be very expensive if we have to put more men in the field to gain daily knowledge of well production.

We are now being asked by our spot-market purchaser to apply for our own transportation contract with the pipeline company instead of using the purchaser's because our individual quantities are so small. They're accustomed to buying in large quantities from the pipeline. We inquired and were told by the pipeline that the newer the contract the more interruptable the sale and delivery of our gas to the purchaser. The result, less possibility for consistent production, more paperwork, and less money for drilling.

A bill has been presented to our State legislature, which we were discussing just a little while ago, of revising the state severance tax calculation, which currently is based on the quantity of gas produced rather than percent of the price received. Before the wellhead price fell, the tax averaged about 3 percent; and now it can be as much 15 to 22 percent. We're urging our State Legislators to pass this bill, even though as it now stands it would be higher than the similar tax in our neighboring states of Texas and Oklahoma.

Also, the delayed reconciliation between the transporter and purchaser of our natural gas forces us to estimate volume and price on the payment forms for the Federal royalty. We're subject to penalties and interest for estimating and consequently paying incorrectly. In addition, we must pay the royalty weeks and sometimes months before we receive any money or any accounting from the purchaser or the transporter. For some of the independents this can amount to thousands of dollars paid well in advance but still carrying the possibility of penalty and interest.

Complying with Federal regulations is not always impossible, but you can be sure it's always expensive.

In January this year the pipeline carrying gas from Canada into our market was frozen off. The demand was suddenly very high for our gas and so were the prices, for about a week; it was like old times. We really didn't realize the impact of the Canadian imported gas until then.

And you will note that although the independent producer is receiving only about one-fourth the wellhead gas price as a year ago, the cost of natural gas to the home consumer has not fallen in proportion. And in some places in California it's actually rising. They are applying for higher prices.

Now, the research and development divisions of our major oil and gas companies have given this country products and designs and inspiration that have pushed our standard of living higher than in any other country in the world: fabrics, plastics, medicinal aids, transportation, outer space probes. Perhaps the major oil and gas companies will be able to hold on, but all of these factors I've jut mentioned combined are beginning to affect the small producer in a very serious way. Additional paperwork, marketing expenses, detrimentally inconsistent well production, sky-high insurance rates, if you can get coverage at all, penalties and interest, delayed payment for the product and lack of a firm and consistent market along with a low wellhead price may soon mean lack of survival to the small independent producer.

If we lose the independent producer, we're back to monopolies. If we lose the independent producer, we've lost the fire, the daring, the heart and soul of the oil and gas industry.

We appreciate your attention today, and we hope you can relate our problems to the national scene. And I do have one question for you.

Senator BINGAMAN. It's not the same one Mr. Karlin had, is it?

Ms. LITTLE. No. This has to do with what Senator Domenici was talking about a moment ago. I'd like to know if it's too late to repeal contract carriage?

Senator BINGAMAN. Thank you. Let me ask you a question, if I could. I gather from your testimony that you feel a limited antitrust exemption to permit cooperative efforts to market oil and gas is an important step to insure that what needs to be done can be done?

Ms. LITTLE. That would be one thing that would help a great deal.

Senator BINGAMAN. Bill LeMay gave us a little status report on the state legislative situation on the severance tax, an issue of interest to folks here. Bill, could you give us any more information on that issue?

Mr. LEMAY. Yes. What Sylvia was referring to, of course, is the unit tax, which is a tax on MCF of gas not in proportion to the value of that gas. We're one of the only States now—maybe there is one other that has a unit tax—but as gas prices have fallen, that has become a large burden on the producers to pay that tax now. So there are two bills in the legislature—and I understand that one has been tabled. The other is still alive—that try—at least, ramp down the tax to a level that is consistent with our neighboring states and go to a percentage basis on that tax. It is a high burden, I understand, to pay a tax that sometimes is 18 percent of the value of the product they are getting when neighboring states are at 8 percent.

Senator BINGAMAN. And that is a tax that's going into the severance tax funds?

Mr. LEMAY. It goes into the severance tax bonding fund. So what it would do—where it would possibly injure the state is only on the new projects, new buildings and all that they might contemplate building. It would not affect the operating revenues of the State.

Senator DOMENICI. I just wanted to ask with reference to contract carriage, could you just give me a little bit more—I don't understand the nature of the question.

Ms. LITTLE. I see the independent producer as having a very difficult time competing with the majors in order to get our gas to a main line transporter. There are gathering lines owned by that transporter. Before you get to the main line, we would have to have individual contracts per producer from our wellheads into that plant through to the main line. And the—from this on into, say, the border in California is an additional price. So our problem in getting in—right now is that we have such small quantities that we cannot compete with those companies who can get their own transportation line, their own transportation agreement through to the main line in order to deliver the gas in one large bulk. In other words, right now we have to sell from each individual wellhead.

Senator DOMENICI. But the reason I didn't answer the question sooner is because what you're trying to do is not repeal contract carriage, which was your question. The notion of contract carriage is a general notion gathering momentum in the past 6 to 7 years, which was an effort to permit—I understand, to force upon the pipeline owners the carriage of their natural gas in their lines by contract for the excess capacity. So, you know, to repeal contract carriage is to make it more difficult to accomplish the goals. The problems we've got—and we never have passed an appropriate contract carriage law, one that works. Some don't think it's appropriate at all. Some pipeline companies don't like it. And we have not changed the antitrust laws with reference to pooling, all of which kind of fell apart as we tried to put through a deregulation of the old natural gas bill over a period of a couple of years. So we would be interested in helping with what you're speaking of, but that isn't accomplished by repealing contract carriage.

Ms. LITTLE. If we had enough money—if we were getting enough money at the wellhead for the gas, we could afford to do it a lot better than at this cheaper rate. Money will buy a lot of things, and that's one of the things it will buy is an opportunity to compete on a reasonable basis, on flat land.

Senator DOMENICI. FERC is implementing what they call Number 36, what they call contract carriage. What we need to do is get a little more information from you whether it's the implementation of that causing the problem or what it is that causes——

Senator BINGAMAN. We still have six witnesses scheduled. But before we go on, let me just declare about a 10-minute break here, and then we'll start up again and continue.

[Whereupon a recess was taken.]

Senator BINGAMAN. Before we call the next witness, I'd like to put into the record at this point a telegram we received from Christine Donisthorpe, a State senator, indicating her support for quick action at the national level to restrict imports by an oil import tax. And we appreciate that telegram very much. We will include that in the record.

[The telegram follows:]

[Western Union Telegram]

SANTA FE, NM, *March 1, 1987.*

Hon. JEFF BINGAMAN, PETE V. DOMENICI,
U.S. Senate, Care Don Shrieber, MC, Oil—Rpt. Dly. MGM.
Attention: Dr. Jim Henderson, President of San Juan College.

It is with deep regret that I am unable to attend this field hearing because of my Senate duties in Santa Fe. However, I must express my concern, and my constituent's deep concern regarding the oil and gas decline, and its devastating effect on our county, our State and our Nation.

I support quick action on the national level in Congress in an effort to restrict imports via an oil import tax. Passage of an oil import tax would enable the United States to build up its own energy reserves, while at the same time bolstering our economies and removing the United States from the vulnerability of foreign powers with whom we have no direct control.

Thank you for your consideration in this matter.

Sincerely,

CHRISTINE A. DONISTHORPE,
State Senator, New Mexico District 2.

Senator BINGAMAN. Our next witness is Rodney Heath with the Farmington Chamber of Commerce. Rodney started in the oil and gas industry locally in 1954 and became production superintendent of Southern Union Gas Co. He began a manufacturing company in 1961 to build oil and gas equipment. He is the past president of the Farmington Chamber of Commerce and a member of the oil and gas committee of the Farmington Chamber of Commerce. So, we're glad to have Rodney here to testify.

STATEMENT OF RODNEY HEATH

Mr. **Heath**. Mr. Chairman, Senator Domenici, I know you share my concern. I hope what we have to say today will help you carry the message on to Washington.

One of the misunderstandings of individuals who are not knowledgeable of the oil and gas industry is the belief that oil and natural gas are common commodities. Although most wells produce some of both, the two fuels are at times competitive. The oil industry and the natural gas industries are very different.

As a theoretical concept, all oil consumed in the United States could be imported; and the United States could get by without any domestic oil production. The free market thinking which says we will buy from the cheapest source, whether domestic or foreign, has been applied to oil with, among other things, a resulting increase in dependence of the United States on foreign oil; but as long as the foreign oil spigot is open and the United States can afford to pay the price, there will be no oil shortage in the United States as a result of misguided Government policies.

Oil, though, is only one of several major energy sources required by the United States. The supply of natural gas, another energy resource, has been severely affected by misguided Government policies. In the case of natural gas, free market thinking is one of the factors leading to a shortage of domestic production with no foreign source being available to replace the shortage.

Canada, at present, is the only significant foreign source of natural gas; and the Canadians are now supplying approximately 5 percent of the U.S. market. By 1990, it's estimated that the Canadians can supply between 8 and 10 percent of the U.S. market. The balance of U.S. consumption of natural gas must come from domestic production. Published estimates reveal that by 1990 the shortfall in natural gas supply to demand will be in excess of 3 trillion cubic feet. To put 1 trillion cubic feet into perspective, the Canadians yearly cannot deliver a trillion cubic feet into the U.S. market. The San Juan Basin cannot deliver a trillion cubic feet into the U.S. market.

The present yearly consumption of natural gas in the United States is 16 to 18 trillion cubic feet. Once the supply and demand curve crosses it will be necessary yearly to replace 16 to 18 trillion cubic feet in reserves just to keep the shortage of natural gas from becoming any worse. Required deliverability replacement will be in excess of 1 trillion cubic feet per year. To replace this amount of natural gas, estimates are that we would require 80 percent of 1981 drilling activity, or an average of between 3,000 and 3,500 rigs working. This level of rig activity would be required for as long as the U.S. natural gas consumption remained in the range of 16 to 18 trillion cubic feet.

It should be mentioned that 1981 was the peak drilling year in the U.S., with a yearly average of approximately 4,000 rigs working. The end of 1981 saw the beginning of the downturn in the natural gas industry. The downturn has been continued from the end of 1981 to present—5 years that have devastated an industry that is vital to the U.S. economy and security.

The devastation has carried through all segments of the natural gas industry. My particular part of the natural gas industry involves the manufacture of surface production equipment required at the well site to process oil and gas. It should be noted that in our market areas there are no foreign suppliers of production equipment. In 1981, my company was backlogged to a year and a half; and used equipment, when it was available, was often selling for more than new equipment.

It is estimated that since 1981, with business failures, bankruptcies, plant closings, mergers, consolidations, et cetera the productive capacity of the production equipment segment of the industry has decreased to less than 30 percent of its 1981 levels. To bring the production equipment industry back to the level required to meet the anticipated needs would take 2 to 5 years; and unless something happens quickly, there may not be a production equipment industry to bring back. Again, I must emphasize that there are no foreign suppliers sitting in the wings to fill the pending production equipment shortage.

In conclusion, I believe that misguided Government energy policies have led the United States to the brink of energy disaster. Consumer suffering, high prices, chronic energy shortages, et cetera are looming on the horizon; and nothing is now being done to stop the further depletion of the developed U.S. oil and gas reserves. I believe that several things need to be done to stop the further decline of the domestic energy industry: first, a floor price for oil at $20 a barrel or better should be established as soon as possible. This is necessary to regain the confidence in pricing of the oil and gas industry, as well as the financial community; second, the problems generated by partial decontrol of natural gas need to be addressed as soon as possible. Many of the disruptions and much of the uncertainty in the natural gas industry have been created by slow and partial decontrol. The Fuel Use Act needs to be repealed and windfall profits tax needs to be repealed.

In my opinion, it is too late for the Government to prevent the pending energy crisis from happening. Timely action now, though, will save enough of the service, drilling and producing industry to give the United States a reasonable time frame in which to recover.

Senator BINGAMAN. Thank you very much. From the testimony we took on Saturday in Hobbs and also in some of the testimony today—I think it's clear that most of the people who have testified—your testimony included—indicate that there's a declining level of activity, drilling activity, declining reserves in both the gas and oil which can really only be slowed, as you see it; it's not something that can be reversed. The actions you're recommending could do a great deal to slow it and to give us time to find alternatives; is that what your testimony is saying?

Mr. HEATH. Well, in addressing what I think happens with natural gas, I think the key to the production that's in the Texas, Louisiana, Gulf Coast area, which supplies 30, 40 percent of the U.S. gas right now; and about 80 percent of the production of that area goes into the northeast. The best engineering estimates that I have is that that gas is being depleted at the rate of about 20 percent a year. I would say that we're losing something over 1 trillion cubic feet of deliverability a year out of that area. Once that starts down and the supply and demand curve crosses—and we just understand how much 1 trillion cubic feet is—obviously it's going to take 3 to 5 years to bring that production back up. And obviously we're headed for a shortfall of natural gas. Regardless of what we do, we're not going to stop it. You can't crank up enough offshore rigs to prevent that shortage occurring.

Senator DOMENICI. I just wanted to thank you for your testimony. And it does bring to mind, following on Senator Bingaman's question, during that recess somebody asked a question—and I think it's relevant—what about alternatives? Somebody said, "What about nuclear?" I don't think we are holding this hearing trying to take the position that the United States can fix its energy policy for the future by merely the adoption of an import fee and the elimination of the Fuel Use Act, windfall profits tax elimination. I don't believe you're saying that, either. Obviously we have to go ahead with all kinds of energy that are currently marketable and that currently fit the marketplace and see to it that our marketplace accomodates to more and more alternatives, including coal and the multiple uses of coal. That's inherent in your statement aside and apart from your business, which is clearly tied to one rather than the other of these various industries; is that correct?

Mr. HEATH. That's correct. It's affected not only oil and natural gas, but also affected the coal and electrical industry. It's not just one industry that has been hurt.

Senator DOMENICI. Thank you very much.

Senator BINGAMAN. Thank you very much for the testimony. The next witness is Tommy Roberts, who represents the Independent Petroleum Association of New Mexico. He's the northern vice president of the Independent Petroleum Association, a member of the board of education of the Farmington municipal schools and lifelong resident of Farmington. We appreciate your being here.

STATEMENT OF TOMMY ROBERTS, NORTHERN VICE PRESIDENT, INDEPENDENT PETROLEUM ASSOCIATION OF NEW MEXICO

Mr. ROBERTS. Thank you, Mr. Chairman. Before I start, I would want to point out an interesting fact; and that is that Rodney Heath, who just presented some testimony, he and I are the same ages. He's been involved in the industry 35 years, and I've only been involved 7. So, you can see what kind of problems we have here.

Senator BINGAMAN. That's strong testimony.

Mr. ROBERTS. Probably the best I can do, but I'm going to go ahead and try to do something else. During this hearing you have heard, and will continue to hear about the extremely depressed condition of the domestic oil and gas industry, an industry which is now in the sixth year of a widespread economic shakeout. Since 1982, thousands of economic entities have been liquidated, including independent producers, drilling contractors, supply and equipment firms and financial institutions.

You have heard people describe the impact of an unstable domestic oil price on the national economic and military security of the United States and on the the economic well-being of State and local governments.

In an effort to avoid redundency, I would like to focus my comments on the one aspect of the broad issue of economic security which, I believe, tends to be overlooked in the discussions of the adverse consequences of a depressed domestic oil and gas industry. That is the role of and impact on education.

Strong emphasis on education is essential to any viable domestic energy policy, and a sound progressive educational structure must be in place and operative in order for the domestic oil and gas industry to thrive.

During the last 5 years, oil and gas companies have been forced to substantially reduce exploration and production budgets. The focal point of some of these cuts has been company personnel via layoffs and payroll reductions. Thousands of industry-related jobs have been lost during that time as a result of substantially decreased petroleum activity. Many of the casualities have been professions in the technical fields: petroleum engineers, geologists, geophysicists.

These are the professionals upon whom so much reliance is placed in the industry efforts to identify and locate new sources of reserves and to effectively and efficiently produce those reserves. Yet, the 5-year depletion in the industry is forcing these experts out of the petroleum field and into other fields of employment. As the depression continues, so will the depletion of the industry's technical expertise. The longer the depression and the resultant depletion of technical expertise continues, the more difficult it will be for the oil and gas industry to meet the requirements of the market when the cyclical nature of the market again calls for increased production and deliverability.

The question is: Will this pool of technical expertise be replenished? I think eventually it will be, but the process will be slow and the longer the duration of the depression the longer the recovery process will take and the more difficult it will be to accomplish.

Those who have formerly been employed as professionals in the technical field will, understandably, be reluctant to leave subsequent positions to return to employment in an industry which had not previously provided adequate job security. They will have to be convinced that the oil and gas industry has emerged from an extended period of decline and instability as an industry recognized by all—politicians, consumers and industries alike—as one which must be strong and viable to assure the economic and military well-being of our nation.

Then, there is a separate and distinct category of technical professionals comprised of men and women who have earned their degrees in petroleum engineering or geology but who have never been successful in locating employment in their chosen professions. Lots of people in this audience know someone who fits into the category. Most likely this person has graduated from college in the last 3 or 4 years. He or she has earnestly sought employment in the oil and gas industry but has been rejected time after time. This person has now probably found employment in some other field totally unrelated to his or her educational background. The time and money used in the college education has, in large part, been wasted.

As a final observation on this aspect of the educational issue; the experiences of these professionals in the technical fields during the last 5 years will not go unnoticed by high school graduates who are entering college and who are making career choices or by college students who have not yet made decisions with respect to educational majors or careers. Few will elect to pursue degrees in petroleum engineering or geology because the prospects for stable employment in the oil and gas industry are extremely bleak. I believe a review of the previous 5 years' enrollment figures from some our institutions of higher education who have specialized in these fields of study would tend to confirm that such a trend is developing.

The ultimate danger inherent in the scenario I have presented is the chain of supply of individuals with a technical expertise to meet the challenge of future demands for discovery and development of these reserves will be irreparably damaged or broken. Action must be taken immediately to create an environment providing incentives for domestic oil and gas exploration and development activities. If these kind of actions are taken now, the danger I have spoken of can be minimized.

I'd like to take another tack to the educational issue at this point, if I may. Another view of the national economic security focuses on the relationship between the strong and viable domestic oil and gas industry and public and higher education.

This view is based upon the belief that the following statements are considered representative of, and accurately reflect, current public sentiment: first, that a significant degree of national economic security is desirable and its attainment should be a high priority of the Federal Government. Second, essential to the attainment of the desired degree of national security is a system of public and higher education of high quality. Third, essential to the attainment of the desired degree of quality in the public and higher education is funding at levels which can be relied on from year to year and which provide incentives and opportunities for the achievement of excellence.

The domestic oil and gas industry is a major source of Government revenue in many states; and some of these states, New Mexico among them, rely substantially upon the revenues for the funding of public and higher education. These revenues are supplied, generally, from severance and production taxes on oil and gas production, from oil and gas lease rentals and bonuses, and from state and oil—Federal oil and gas lease royalty.

During recent years stated government revenues generated from oil and gas activities have declined dramatically as the natural gas market and crude oil prices have experienced a prolonged period of extreme instability. Consequently, the ability of state government to adequately fund public and higher education has been impaired in those states where the oil and gas industry is a substantial source of that kind of funding.

To illustrate some of these general comments and observations, I would like to point to the New Mexico experience. In 1984, direct taxes and other revenue attributable to oil and gas production totaled approximately $1.0 billion. In 1986, these revenues totaled approximately $735 million. The sharp reduction in total revenues between the end of 1984 and the end of 1986 can be simply explained; declining natural gas and crude oil prices resulted in reduced production rates, reduced sales value of production, and reduced drilling activity.

The revenue picture for 1987 in New Mexico warrants continued pessimism, I think. Public education has already felt the bite of an anticipated shortfall in State government revenues from all sources for the fiscal year 1986/1987 in the form of a 2-percent reduction in the funding level originally allocated to public education. A reduction in funding of this magnitude creates significant hardships on public school districts whose budgets are developed, in large part, on the assumption that revenue projections of the State will be met and realized. When reductions in funding are implemented, budgets must be adjusted accordingly, and regardless of which budget items are adjusted, the impacts of the adjustments are directly felt by students. The significant point to be made, however, is that the expected shortfall in total State revenue can be attributed, in large part, to the depressed and relatively inactive oil and gas industry in the State.

Related to the decline in recent years of State revenues generated from oil and gas activities in New Mexico is the stagnation of the level of funding of public and higher education in New Mexico during these years. During this time increases in teachers' salaries have been nominal, staff and program reductions have been implemented, employee morale has worsened, and more of the available funds have been allocated to rising utility and insurance costs and, consequently, less of the available funds have been allocated to people and instruction. The combination of these factors results in an educational environment lacking in motivation and incentives for the achievement of excellence. Innovation is generally not regarded; therefore, it's generally not attempted. The creation of opportunities for the achievement of excellence is costly; therefore, new programs are not implemented.

In summary, given these circumstances one might conclude that the level of public and higher education in New Mexico and other States similarly situated is not what it should be in order to maximize opportunities for improvement of education and, consequently, to enhance this Nation's economic security.

The revitalization of of the domestic oil and gas industry would have a dramatic impact on the State of New Mexico to direct additional dollars toward public and higher education. The need is immediate; and, therefore, immediate action must be taken to create an environment providing incentives for domestic oil and gas exploration and development activities. Along these lines, the Independent Petroleum Association of New Mexico has previously endorsed the concept of an oil import fee. The association believes that such a fee would provide much needed domestic crude oil price stability.

In addition, the association has long been an advocate of action to repeal the Fuel Use Act and the incremental pricing provisions of the Natural Gas Policy Act of 1978. The removal of the restrictions placed on potential users of natural gas by these measures would open a market for natural gas sales not previously available to producers of natural gas. And finally, the Association advocates the repeal of the so-called windfall profits tax.

This concludes my formal statement, and I'd be happy to answer any questions you have.

Senator BINGAMAN. I didn't have a question. But I do very much appreciate you making a case, as you have so well, for the strong relationship between education and the oil and gas industry in this state. I think the people in our State Legislature who are struggling to go forward with the improvements in education that have been laid out are certainly experiencing the problems that you described in such a visible form. Pete, did you have any questions or comments?

Senator DOMENICI. I just wanted to compliment you on your remarks. There's just no question that it's extremely important that we continue our quest for educational excellence; and whether by accident or otherwise, a number of the oil patch states have relegated their educational opportunities rather directly to the success or failure of the industry. Just a closing remark, among America's finest industrial list today, those who have had a chance to look back on its history, they would conclude that over the long run knowledge—knowledge is America's real resource. And we're going to make it into that 21st if we're on the cutting edge of knowledge; and we're not if we're not. And I think in a sense—you were saying that we may just be a little slower getting there and may lag because of the tie between oil—between revenues that come from oil and gas and our institutions, both public and private, of higher learning; and I compliment you for your remarks, Mr. Roberts. Thank you.

Senator BINGAMAN. Thank you very much. Our next witness is John Cook, who is speaking for the service contractors. He's the senior vice president for operations for Halliburton. I understand that John came in this morning from Oklahoma just to be here for this hearing. And we appreciate you coming.

STATEMENT OF JOHN G. COOK, SENIOR VICE PRESIDENT, DOMESTIC OPERATIONS, HALLIBURTON SERVICES, A DIVISION OF HALLIBURTON CO.

Mr. COOK. Thank you, Senator and Mr. Chairman. As you stated, I'm domestic vice president for Halliburton Services. My responsibilities include all operations within the United States, which we operate close to 150 service centers, within the domestic United States. And I'm speaking today on behalf of Halliburton Services and other related service industries that service the oil and gas industry.

Halliburton Services provides services to the petroleum industry. It is with great pride that we assemble highly trained people, the best equipment, and the most advanced technology, as our company cements, stimulates, tests and completes oil and gas wells. Historically the petroleum industry has responded to our nation's needs for energy. The service industry, and Halliburton Services, in turn, have responded to the petroleum industry's efforts to discover, produce and maintain our oil and gas resources. The long-term health of the service industry, including the capability to respond in times of national emergency, is directly related to the level of drilling activity and oil and gas production.

During the first week of January 1986, the U.S. rotary rig count was 1,915 rigs. And as the price of crude fell at an unprecedented rate, the rig count fell to a low of 663 rigs in July. This represents a 65-percent reduction, or roughly 50 rigs per week. Drilling and production activity was virtually grinding to a halt. And to provide a perspective to these numbers, it is important to remember that the rig count peaked in December of 1981 at 4,530. The rig count averaged 3,970 in 1981, 3,117 in 1982, 2,229 in 1983, 2,429 in 1984, 1,975 in 1985, and down to a low average of 970 in 1986.

Senator DOMENICI. How does an offshore rig figure into those numbers?

Mr. COOK. It is included in the rotary rig count.

Senator DOMENICI. So even if it's a giant, just one——

Mr. COOK. That's right. It was during this time period that oil and gas production was held relatively constant. We believe that a minimum of 2,500 rigs is needed to replace the expected declines in production.

The results of the reduced drilling activity in 1986 is already apparent. The decline in daily crude production during 1986 was approximately 1.15 million barrels. Studies show that as much as 50 percent of gas production results from wells drilled within the past five years. It is estimated that natural gas deliverability has declined about 0.7 trillion cubic feet from 1985 to 1986. The price decline of 1986 has set the tone for increased crude and natural gas imports for our Nation, along with the resulting impact on our balance of payments, national economy and energy security.

The drilling activity and the production declines within the State of New Mexico have been even more dramatic. The rotary rig count started out the year at 72 and declined to a low of 11 in July, and this represents an 85 percent decline. In addition, Petroleum Information of Denver recently released data that indicates that New Mexico's 1986 gas production has declined 18 percent from 1985.

The tremendous declines in drilling activity and production that have occurred within the U.S., as well as New Mexico, provide grave testimony to the market decline and the adjustments made by my company, Halliburton Services.

Concerning the impact on Halliburton Services, as well as other service industries, from 1981 to 1985, our revenues have declined one-third in response to the decline in drilling activity. During 1986 our revenues declined an additional 50 percent, which placed extreme pressures on operating profits. Our company has a conservative philosophy concerning our financial responsibility, we control our companies and adjust rapidly. Since January of 1986, we reduced our employees by 45 percent, while at that time striving to maintain a core group of highly trained professionals. This task has been extremely difficult, as we have attempted to balance the short-term and the long-term interests of our stockholders.

Early in 1986 we implemented a furlough plan that was designed to protect our core employee group. This plan required that all employees, including management, take 1 week off without pay in every 8-week period. This has helped us reduce cost; it's allowed our employees to share the burden of reducing the pressure on operating profits. However, there are limits even our desired core employee numbers. If 1986 activity levels represent the norm for the future, then further adjustments regarding highly trained and skilled people at all levels must occur. Our current levels are approximately one-third of what they were in 1982.

Our Farmington district experienced similar declines of about 89 percent from January to July of 1986. Our district responded to reduced costs, and our employee count was reduced by 70 percent. Once again, our field people have attempted to maintain a core employee group. But the fact remains that the employees who are no longer working were highly trained, excellent employees, also. The employees are currently being relocated into other industries and most will not be retrievable. Mr. Chairman, we're talking about people, families and communities; and there's no small amount of trauma associated with these dislocations. The numbers only reflect the magnitude of the problem and portend the difficulty that will be experienced in preparing the industry to meet the future energy needs of our nation.

In general, Halliburton Services and the service industry has undergone a tremendous down-sizing and reorganization process. This process includes people and equipment, as well as research and development. It is important to remember that if any of the needed inputs of tubulars, of equipment, chemical supplies, technology, capital or personnel are absent, the results are manifested in reduced drilling activity, as well as productivity.

The importance of drilling activity to other industries within the economy is not fully recognized. Our analysis indicates that an average onshore well within the domestic U.S. uses about 45 tons of steel. If an average passenger automobile manufactured in the United States contains 2,000 pounds of steel, then each well represents about 45 automobiles. The 40,000 wells that were not drilled in 1986 represent the same steel demand for 1.8 million cars. Thus, a steel market that was approximately equal to the auto production of Ford Motor Co. during 1986 was virtually eliminated.

And this is just only one case. Some of our recommendations would be to provide great emphasis on the needs of our customers, because our clientele includes majors as well as independents, and the oil and gas producers and virtually all segments of the petroleum industry.

Halliburton Services recommends energy policies that encourage an extensive exploration and development of domestic U.S. hydrocarbon reserves.

We need crude price stability. First and foremost, producers need crude price stability to warrant an orderly exploration and development program. Our own internal analysis indicates that a constant crude price of $28 to $30 per barrel, expressed in 1986 dollars, would currently be required to replace the expected production declines.

Another important area is the ability to market. Natural gas producers have seen an erosion of their market as the crude price decline made "resid" more competitive relative to natural gas. For more than three decades natural gas has remained, to some extent, under price regulation. In addition, the Power Plant and Industrial Fuel Use Act restricts the use of natural gas in certain industrial and utility facilities. We believe our customers would be well served if this two-phase regulation were eliminated.

Taxation, we recommend equitable tax treatment for the oil and gas industry. Specifically, we recommend current year expensing of intangible drilling costs, allowing for the percentage depletion and the repeal of the windfall profits tax.

Our next recommendation is exploration of Government-owned land. We believe an orderly exploration and development program on Federal lands, onshore and offshore, can be achieved that will provide needed energy resources and maintain the integrity of the environment. We recommend the development of Federal lands. Mr. Chairman, we respectfully submit this statement for your careful consideration. Thank you.

Senator BINGAMAN. Thank you very much. I appreciate that testimony and appreciate you coming such a distance to give us testimony today. Let me just ask you to elaborate a little more on a point you made—you indicate that if 1986 activity levels represent the norm for the future then further adjustments regarding highly trained and skilled people at all levels must occur. If you can, just elaborate on that.

Mr. COOK. 1986, in my 36-year history with the industry, is the worst year that we've gone through. And in visiting with our customers throughout the domestic United States, we see 1987 as just a repeat of 1986, with the possibility that it could be worse if something is not done in the very near future. We started out with a good many rigs running the first part of 1986. We don't have that windfall this year. So our overall rig average is going to have to be great in the latter part of this year, the last quarter or even the second quarter. If that's not the case we're going to have to continue to cut people, highly trained people; and they are going to go to other industries. We've seen that in the last several years altogether.

Senator BINGAMAN. I gather if the price remains in the $16 to $18 range for oil and the present range for gas, that would be your expectation?

Mr. COOK. That's right. They need better prices than that.

Senator BINGAMAN. Did you have some questions?

Senator DOMENICI. I would say to you one thing that you have stated by way of stabilizing oil prices that is significantly different than the previous testimony, you're a little higher in terms of the dollar per barrel. We have heard generally, not for maximum for growth but for stability, anywhere from $22 to $24. I believe you said 28 to 30, did you not?

Mr. COOK. That's right.

Senator DOMENICI. Secondly, I wonder--testimony you gave with reference to the effect on other industries was dynamic, dramatic.

The comparison with the steel industry is the best I've heard. I wonder if you have time and if the chairman would leave the record open for you—to leave the record open, if you and your other people could go beyond the steel and Ford Motor Co. analysis and pick as many analogies in America's society as we can that 40,000 wells in 1 year that weren't drilled yield. There must be a lot of them in terms of us having something to talk about.

Mr. COOK. It's affected numerous other industries that we just don't realize.

Senator DOMENICI. Do you think you can quantify some of those on a national basis?

Senator BINGAMAN. I think that would be good.

Senator DOMENICI. How long would that take?

Mr. COOK. A week or two.

Senator DOMENICI. Thank you very much.

Senator BINGAMAN. Thank you for coming. We appreciate it very much.

Next we have two witnesses representing the city of Farmington and the Farmington Industrial Service, George Harrison and Mary Fischer. Both wanted to make statements. George Harrison is a city councilman for the city and a local attorney. Mary Fischer is executive director of the Farmington Industrial Service and former councilman—council person.

STATEMENT OF MARY M. FISCHER, EXECUTIVE DIRECTOR, FARMINGTON INDUSTRIAL DEVELOPMENT SERVICE, INC.

Ms. FISCHER. Thank you. On behalf of the Farmington Inustrial Service Board of Directors, please accept our appreciation for allowing me the opportunity to present some ideas relating to economic development in San Juan County.

This year we as New Mexicans are celebrating our State's 75th birthday. We are a young state with great expectations for our future, but for 5,771 residents of San Juan County those dreams are clouded by the reality of unemployment. Our residents are young—72.6 percent are under 40 years of age. And many are facing a bleak future. Soon we'll be able to list people as one of our State's major export items, unless we are reminded of a passage by T.E. Lawrence which says that,

> All people dream; but not equally. Those who dream by the night in the deepest recesses of their minds wake in the day to find it was vanity. But the dreamers of the day are dangerous people, for they may act their dream with open eyes to make it possible.

Such is our task today.

As a lifelong resident of Farmington, I have observed a boom/bust economy that is far from ideal. In boom times the advantages are obvious: stimulated trade, abundant revenues, higher employment. But there are disadvantages as well: crowded schools, inadequate infrastructure, inflated cost of living. Certainly we are aware of the difficulties of a bust economy, and I'm unaware of any advantages. As a person who has grown up in Farmington, was educated in half-day sessions due to school overcrowding and has noted our overall economic turbulence, I would suggest that our priorities lie in economic stabilization, much of which, but not all of which, can be accomplished through diversification.

Fortunately, we at FIDS are working in that direction, but we need help; 30 States in this country have enterprise zones, New Mexico does not. Perhaps our congressional delegation could assist us in obtaining this designation. Tax credit, venture capital funds, regulatory relief, improved transportation systems and increased job training opportunities are examples of assistance from the Federal and State level to help us who are in San Juan County. We are asking for help for friends and neighbors in the oil and gas industry, for they are the backbone of our economy; and when they suffer, so do we all. Our local efforts at attracting outside tourist dollars are being hampered by the fact that many of our traditional tourists were from the oil producing states and are now no longer spending either time or money in New Mexico. Our efforts of filling the voids in our local economy were thwarted when it became evident that fertilizer and explosives were being purchased outside of our area and that they could be produced locally by extracting the products from natural gas. However, the unstable pricing of gas is making the construction of such a facility nearly impossible at the present time. The decline in the gross receipts tax indicates less spending. The decline in the lodger's tax indicates fewer overnight visits.

While the negative impact of the oil and gas industry has been overwhelmingly significant, it must be noted also that we are taking steps to improve our overall economic conditions. There are 28,907 San Juan residents who are employed. There are new businesses locating here in a variety of specialities; like restaurants, rehabilitation centers, furniture stores and distribution centers. While any new jobs are created are coveted, one must also be aware that many of our new jobs are in the service category and are paying far less than jobs were paying in the oil fields.

As noted in the report released by the Joint Economic Committee of Congress, more than half the 8 million new jobs created in the United States between 1979 and 1984 paid less than $7,000 a year, and many of our newly created jobs will be comparable.

With the assistance of our congressional delegation we have seen they are commited to our local economic development. May I remind the audience of our elected officials' support of the Animas/LaPlata project, of NAPI, of the Navajo Dam hydroelectric plant, of our airport tower and the ILS system at the airport, of the Dineh powerplant, of health care programs and of roads and highways. In these times of economic hardship and strife it is often difficult to find things for which to be grateful, particularly if you're one of the 5,771 people who are out of work; but I think we should all be especially grateful to our delegation who have so often put aside partisan politics to help us and our fellow New Mexicans and our fellow Americans. For all they have done and for all they will do for this, we thank you.

Senator BINGAMAN. Thank you very much. George, why don't you go ahead and make whatever statement you have.

STATEMENT OF GEORGE HARRISON, CITY COUNCILMAN, FARMINGTON, NM

Mr. HARRISON. I'm not going to take your time to read our city publication. You've received a copy of it. I would just like to center on a couple of things that I think the report points out. As an elected official, I think the first thing to realize is the size of all the problems you have to deal with. Whether it's the city council or Congress or the Senate, there's an ever increasing demand for services and things that the public wants; and yet, frequently, the revenue trail does not follow that demand. And I think a good example of that is our utilities service here in Farmington.

As you look through the exhibits at the back of our testimony, you'll see a Farmington population which has had a few ups and downs, but it's generally increased through the years. You'll see up until this decline a steadily increasing electric usage demand. And in electric utilities, much like oil and gas, there's a very long lead time. So the city council before us—I think Mary was in it—said, "Well, we have to have a plan for the future. Let's go out and buy more generating potential." And you see that we did purchase it and you saw what happened when the decline hit.

You can see we've had pretty much flat usage from that time. Well, at the same time we've purchased new generating capacity and we're sitting here suffering with that excess capacity much like much of the other utilities in the area. And I think what we see from that is the same thing the oil and gas industry is telling you. What we need is some amount of certainty. And to that may I point out the need for something like the import fee.

We have to look at something that gives us something in a long-term basis that we can do our planning with. Because if there is a steady development of the oil and gas industry, places like the city of Farmington can plan for that. You can see other areas. The expansion of the land area of the city has been dramatic. The demands on us for police services, utilities, streets, all of that is continuing to rise; and when we have an economic bust of this nature, we as a city are forced to live with those rather steady or even declining revenues and provide increased services.

So I guess in summary, in looking at the city we can all paint a bleak economic picture, but the one thing that we would ask you to help us provide is some sort of a stable future. And as I listen to the oil and gas experts testify, I think the one thing that comes through over and over again is we have to have some sort of stability. So I would ask you as you're looking for the answers—and I know they are complicated—to look for something that will give us some sort of a stability over the future so we as a city, we as an industry here can plan for our future.

[The statement from the City of Farmington follows:]

George Harrison

UTAH | COLO
ARIZ | N.M.

CITY OF FARMINGTON, NEW MEXICO
OFFICE OF THE MAYOR
505/ 327-7711

March 2, 1987

The Honorable Jeff Bingaman
United States Senate
Chairman of the U.S. Senate
 Oversight Hearing

Dear Senator Bingaman:

Please accept the attached document as written testimony for the United States Senate Oversight Hearing held in Farmington, New Mexico on March 2, 1987.

This document presents the view of the City of Farmington, New Mexico concerning the impact of the oil and gas industries on local government in Northwest New Mexico.

As Mayor of Farmington, I appreciate the concern you have about the oil and gas issue in New Mexico. I welcome you, Senator Domenici and Senator Wirth to Farmington as you gather important testimony about an issue that affects our entire nation.

Respectfully submitted,

Thomas C. Taylor,
Mayor

TCT/cs

P O BOX 900, 87499

THE EFFECT OF THE OIL AND GAS INDUSTRIES ON THE CITY OF FARMINGTON, NEW MEXICO

INTRODUCTION

Purpose of the Report

This report from the City of Farmington, New Mexico is presented as written testimony for the Senate Oversight Hearing on the impact of oil and gas industries on local government in northwest New Mexico. It is not our intention to take a particular stand on federal policy regarding oil and gas, but to present information to the Committee so that its members might better understand the nature of local government problems associated with the current economic reality.

Since local government problems arose with early growth situations in Farmington, the report will provide a brief background on the early exploration of oil and gas in the Four Corners and how population surges set the stage for today's local government uncertainties. Next, we will discuss the direct impact of oil, gas and other mining industries on the City's infrastructure development, as well as direct revenue contributions of these industries to our economy.

Finally, we will focus on problems that have developed at the local government level due largely to the fluctuations of oil and gas revenues and the resulting ripple effects generated throughout Farmington's economy. We hope to realistically portray the difficult task faced by Farmington's public policymakers as they balance the community's needs with an ever-changing revenue picture.

Background

Prior to 1950 the principal economic livelihood of Farmington and the surrounding county was agricultural with fruit crops dominating. In 1950 the population of the city was 3,637. A major transformation began taking place in the late 1940's and early 1950's as the result of oil and gas exploration and development in the San Juan Basin. Although discovery of oil and gas in the Basin dates back to the mid-1920's, it was not until the early 1950's that the first transcontinental pipeline network was completed. With a means of accessing national markets, exploration and production within the Basin accelerated dramatically in the 1950's. During that decade the sleepy agricultural town experienced explosive growth reaching a population of more than 23,000 by 1960. Although an oil and gas induced economic downturn resulted in a net population loss during the decade of the 60's, the 1970's once again brought prosperity. While the Census Bureau indicated a net population increase of 9,242 between 1970 and 1980, local estimates place that number closer to 12,000. Since 1980, population growth has been more modest. Exhibit A shows the growth of the city since 1950.

The rapid growth of the city was accompanied by a rapid expansion of land area served by the city. In 1950 there were approximately 3 square miles within the city limits of Farmington. The current city limits encompasses nearly 24 square miles. Exhibit B indicates the growth of territory within the city limits since 1950.

ECONOMIC IMPACT ON LOCAL GOVERNMENT

Impact Of Growth on Municipal Services

Perhaps the greatest impact of oil and gas activity in Farmington has been the extraordinary construction of facilities to provide basic municipal services to its residents. It is almost inconceivable that a small town of under 3,637 residents in 1950 would today contain 153 miles of paved streets and twenty-two additional miles of streets that are waiting to be paved. The production of treated water in Farmington has increased by eighty percent since 1964, requiring an additional treatment plant. The treatment of wastewater has increased proportionately; but environmental regulations have made treatment facilities more complex and more costly. Police and fire protection services have expanded due to the influx of residents and the expansion of the service area. Urban planners must address a plethora of zoning and other growth issues during a very limited period of time. In 1987, the issue of leisure services comes to the forefront as residents have more time and desire to devote to recreational activities.

Exhibit C shows the enormity of the impact on the City's electric utility. The utility expansion began in 1973 and has resulted in 119 miles of transmission lines, 1,775 miles of distribution lines and 12,500 electrical transformers to deliver 70,440 kilowatts of peak capacity to 27,487 customers.

Financial Contributions of the Oil & Gas Industry

A review of major industrial categories for San Juan County reveals that the mining sector of the economy, which includes oil and gas producers, drillers, as well as companies engaged in oil and gas field services, accounts for nearly 25% of the total gross receipts of the county. This percentage is even more remarkable in light of the fact that the same sector of the economy directly provides fewer than 15% of the jobs in the county. In the fiscal year ending June 30, 1986 that sector of the economy reported gross receipts of approximately $421,370,000.

The City of Farmington has received severance tax funds in the form of State of New Mexico grants for infrastructure construction projects. Although the amount of funding varies from year to year depending on funds available and competitive requests, the City received $143,000 in Fiscal Year 1987. Our request for Fiscal Year 1988 will be $400,000 to $600,000, but we anticipate having a good chance to receive only $100,000 of that request.

PROBLEMS ASSOCIATED WITH OIL AND GAS INDUSTRY DECLINE

Labor Force and Employment Levels

The decline of the oil and gas industry in recent years has had a significant impact on other sectors of the economy as well. A review of Exhibit D entitled "Labor Force" indicates that the total labor force in San Juan County has declined from an average annual peak in 1981 of 38,856 to a preliminary December, 1986 figure of 34,478. Perhaps more important is the fact that the rate of unemployment (see Exhibit E) has surged from 7.4 percent during that peak year, 1981, to a preliminary December, 1986 figure of 16.2 percent. This decline has not been restricted to just the oil and gas sector of the economy. Although estimates vary, for every 10 jobs in the "Basic" oil and gas industry, somewhere between 8 and 18 non-oil and gas industry jobs are created. Unfortunately this multiplier effect works in reverse as well. As oil and gas jobs are lost, many other jobs disappear with them. In fact these other jobs may be affected for several years following the stabilization of oil and gas employment.

Impact On Other Industries

Clearly the oil and gas industry does not exist in a vacuum. All other major sectors of the economy rise and fall with the oil and gas industry.

One good example is that of the housing industry in Farmington. Between 1977 and 1981, the number of new housing units constructed in the city averaged about 500 per year. The average over the past five years has dropped more than 180 percent. Last year new housing construction reached a 15-year low with the addition of only 93 new dwelling units. This decline is even more remarkable in light of the attractive mortgage rates currently available to home buyers. Exhibit F provides a history of new housing construction in Farmington since 1970.

Farmington has developed a basis for economic diversification that has somewhat reduced the negative impact of the present oil and gas decline. There can be no doubt, however, that oil and gas activity, representing almost one-quarter of all gross receipts revenue, has a residual effect on such industries as retail trade, manufacturing, wholesale trade, banking, utilities and tertiary services. Population and payroll fluctuations alone would impact these other industries. But it becomes more than simply fluctuations in numbers. If community leaders are not careful, a serious decline in the area's major industry could soon be reflected in negative attitudes by the citizenry and local businesses. The progressive climate that once encouraged investors may change to one that makes a business investment in the area appear to be risky.

Impact on Local Government

We have noted the direct financial contributions oil and gas businesses have made to Farmington's economy. Mining industries constitute one of the two leading revenue sources in San Juan County. Also clear is the direct relationship between expenditures by oil and gas businesses and local government revenues from businesses in other industrial categories. It is easy to assume, then, that a significant decline in oil and gas revenue will not only create its own negative impact on local government revenues, but its negative ripple effect on other business categories will serve to amplify this impact.

The gross receipts tax revenue graph (see Exhibit G) clearly illustrates a key problem that has troubled local government officials for years, i.e. the roller coaster-like changes in the level of revenue from year to year. These revenue swings have been largely attributed to oil and gas activity in the Four Corners, and the resulting ripple effect on other businesses that inevitably follows closely behind. Exhibit H reveals the major gross receipts tax revenue decline being experienced by the City during the current fiscal year.

It is, perhaps, not fair to blame all revenue fluctuations on oil and gas activity. San Juan County also boasts two major coal-fired power plants that have recently experienced scaled-down employment due to the completion of plant construction phases. This obviously has impacted population and payroll levels in San Juan County. On the other hand, unfavorable competition for electric power with low-cost gas-fired plants in California has resulted in decreased power plant employment levels in San Juan County. Our resources, natural gas and electric power, are not being exported, thereby adding to the local revenue decline in Farmington.

One aspect of the problem of revenue swings is the difficulty local government officials have in forecasting revenue very far into the future. Unfortunately, local businesses and consumers have no influence on the exportation of the area's oil and gas resources. These decisions are made on a national or global scale, allowing local officials little or no opportunity to forecast the very trends that affect their own operations.

Since the first real population boom in Farmington in the 1950's, local government has experienced a somewhat special relationship between the timing of revenues and the need for capital improvements. The scenario begins with a fast and large increase in Farmington's population and number of businesses. The result is a construction boom creating a tremendous demand for utility service, streets and other related governmental services. Local government is unable to meet the demand and uses quick, but sometimes short-term solutions, to deal with the near crisis. Although revenues increase during the boom, the City's ability to build critical capital improvements lag behind the demand. When demand slows, it's usually due to an economic slump in the oil and gas activity. This, in turn, results in a revenue decline, further impairing the City's ability to catch up with service demands previously experienced.

This scenario continued for several years. Demand for services remained high because the revenue swings did not allow facility construction to catch up. In recent years, a determined effort has been made to construct facilities that will handle peak service loads. Sizing for peak demand when the demand fluctuates causes budgeting problems, especially when revenue forecasts are difficult to prepare. Regardless of revenue levels, however, the construction of facilities for peak demand use results in fixed costs that must be met. In the case of Farmington's electric utility, electric power capacity was purchased on a long-term basis to meet peak loads projected several years ago. Now, the service demand for electricity has dropped considerably, but the utility must continue to pay for peak load power levels. When outside competition eliminates the market for excess electric power, as is now the case, utility revenues are further diminished. A utility that was forced to purchase power capacity to meet high peak demands due in large part to high oil and gas activity, now has no market for the greater amount of excess power. This is largely attributable to the low activity in the oil and gas industry.

During the 1970's, the City of Farmington began to use the sale of municipal bonds, mostly revenue bonds, to provide the necessary funds to construct critical capital improvements. Exhibit I illustrates the level of new bond issues beginning in 1977. While the bonds tend to level the rate of expenditure over a longer period of time, their retirement also creates fixed costs to be reckoned with during economic downturns. The City has taken good advantage of refunding opportunities to lessen the fixed cost impact on operating funds.

Each year the City of Farmington updates its five-year Capital Improvement Plan. Because of revenue swings, the CIP may only be used as a planning tool in a restricted sense. Projects requested for the first year must often be delayed until a later year because the funds were not received due to economic hardship. The re-shuffling of projects for the five-year plan is more the rule than the exception.

Competition for Diminishing Resources

The City of Farmington is now entering a new phase in the allocation of financial resources. Heretofore, revenues were received from several significant sources other than gross receipts taxes, such as Revenue Sharing, state and federal grants and through joint powers agreements with other governmental entities. Through the years, Farmington has been able to increase the gross receipts tax rate to offset the higher cost of providing services. The sale of tax-free municipal bonds at favorable interest rates has been a good source of financing during difficult times.

We are now finding these revenue sources to be diminishing in significance, if not evaporating altogether. Revenue Sharing, used to purchase equipment, has ended. State and federal grants are falling to lower levels. State government, hard hit by the loss of severance tax revenues, has usurped gross receipts taxing authority once given to local governments.

Local politics have also come into play with an effect on revenue sources. A citizen movement to deny local government's use of gross receipts taxing authority was successful in defeating a referendum to use an additional 0.75 percent gross receipts tax for infrastructure improvements. Funding pressures have generated some disagreements among local governmental entities regarding the costs of services provided by one entity for another.

The consequence of these various pressures is an intense competition for dwindling funds. Local government officials must choose to fund infrastructure improvements in an attempt to catch up or maintain present service levels enjoyed and expected by the citizenry. This balancing of priorities has been less difficult in the past because relative revenue levels were high enough to maintain services along with showing progress in infrastructure construction. Now, with several different revenue sources being diminished, both services and infrastructure are in jeopardy. To cut operating expenses will mean reducing the number of employees with its negative effect on service levels and local unemployment. To spend less on capital improvements will mean it will take longer to catch up to the growth demands of the past. It will also mean that older infrastructure, such as streets and sewer lines, will decay faster because maintenance funds are not available at necessary levels for repair or replacement.

Conclusion

We hope this report has provided a reasonable explanation of the impact of the oil and gas industry on Farmington's local government. Such is the complexity of the subject that we have undoubtedly missed some of the more subtle points germane to the issue.

We recognize that oil and gas activity not only influences our local economy, but it sets the economic pace in many respects. We recognize the need to support our oil and gas industry in an effort to stabilize its impact on our revenue picture. We also recognize, however, the need to take prudent action to protect our local economy from revenue fluctuations by striving to create a climate of inducement for industrial diversity in San Juan County. The City of Farmington has generously supported the Farmington Industrial Development Service and the Convention and Visitors Bureau to help attract different types of industry, conventions and tourism to our community. We, as a community, must be able to determine our economic direction at the local level as much as is practical, and take the difficult steps to realize our enormous potential.

We thank the Committee for giving us the opportunity to present our economic position.

Exhibit A

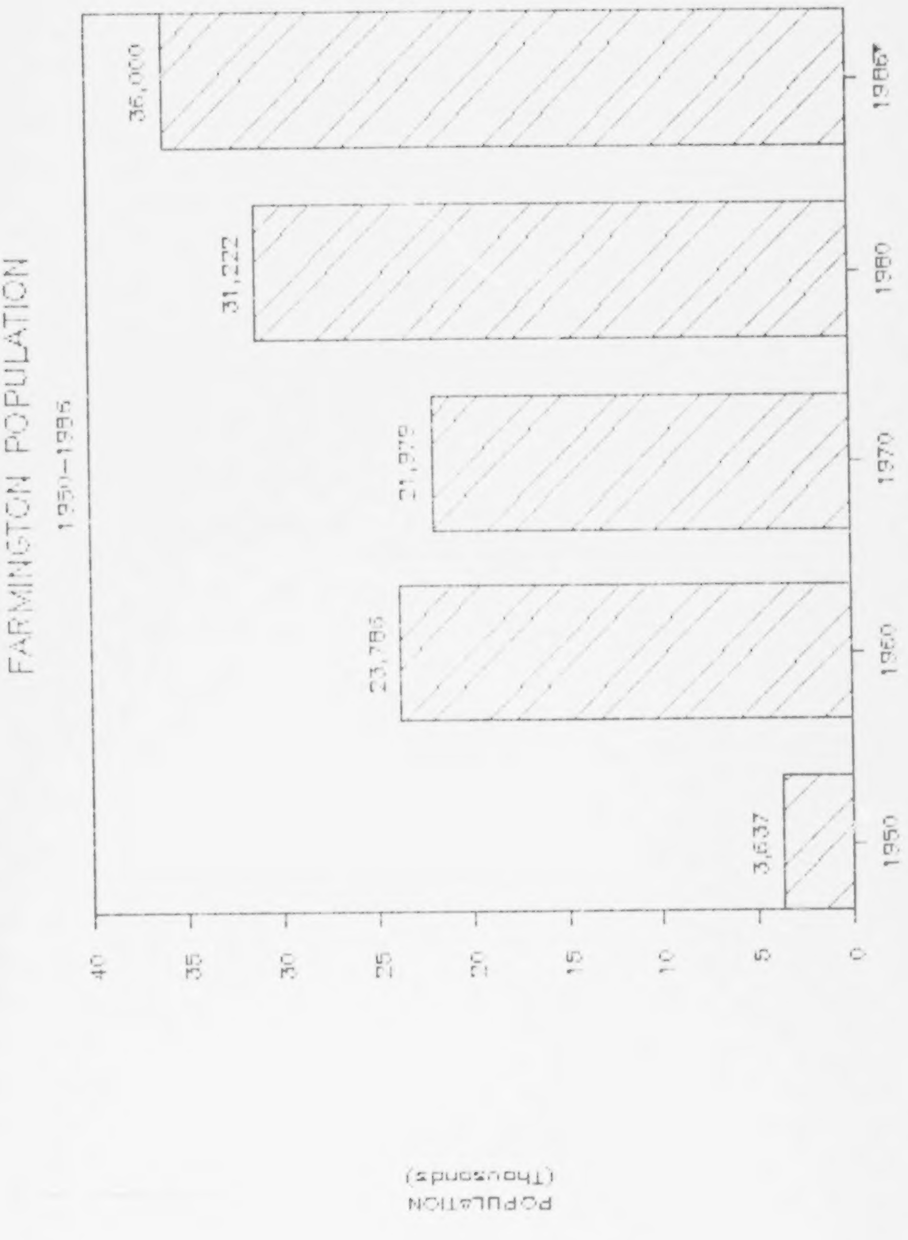

FARMINGTON POPULATION
1950-1986
POPULATION
(Thousands)
40
35
30
25
20
15
10
5
0
3,637
23,786
21,979
31,222
36,000
1950
1960
1970
1980
1986*

Exhibit B

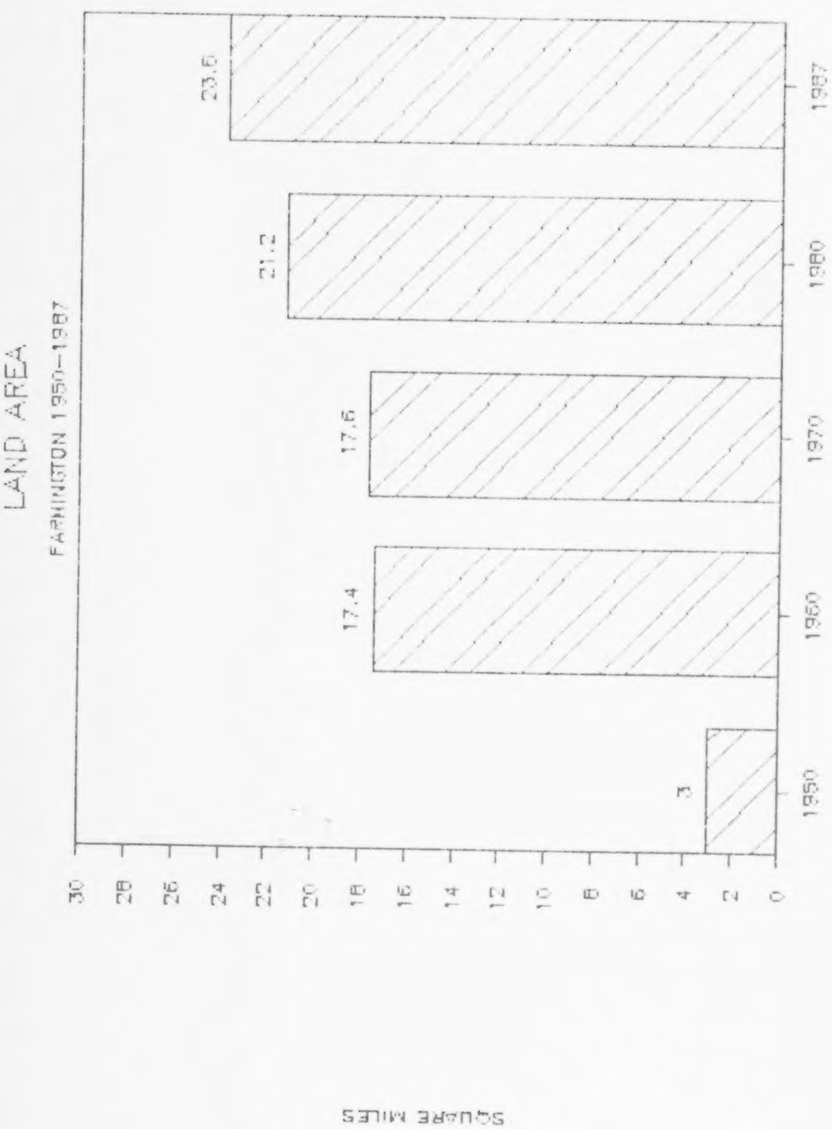

LAND AREA
FARMINGTON 1950–1987
SQUARE MILES
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
3
17.4
17.6
21.2
23.6
1950
1960
1970
1980
1987

Exhibit C

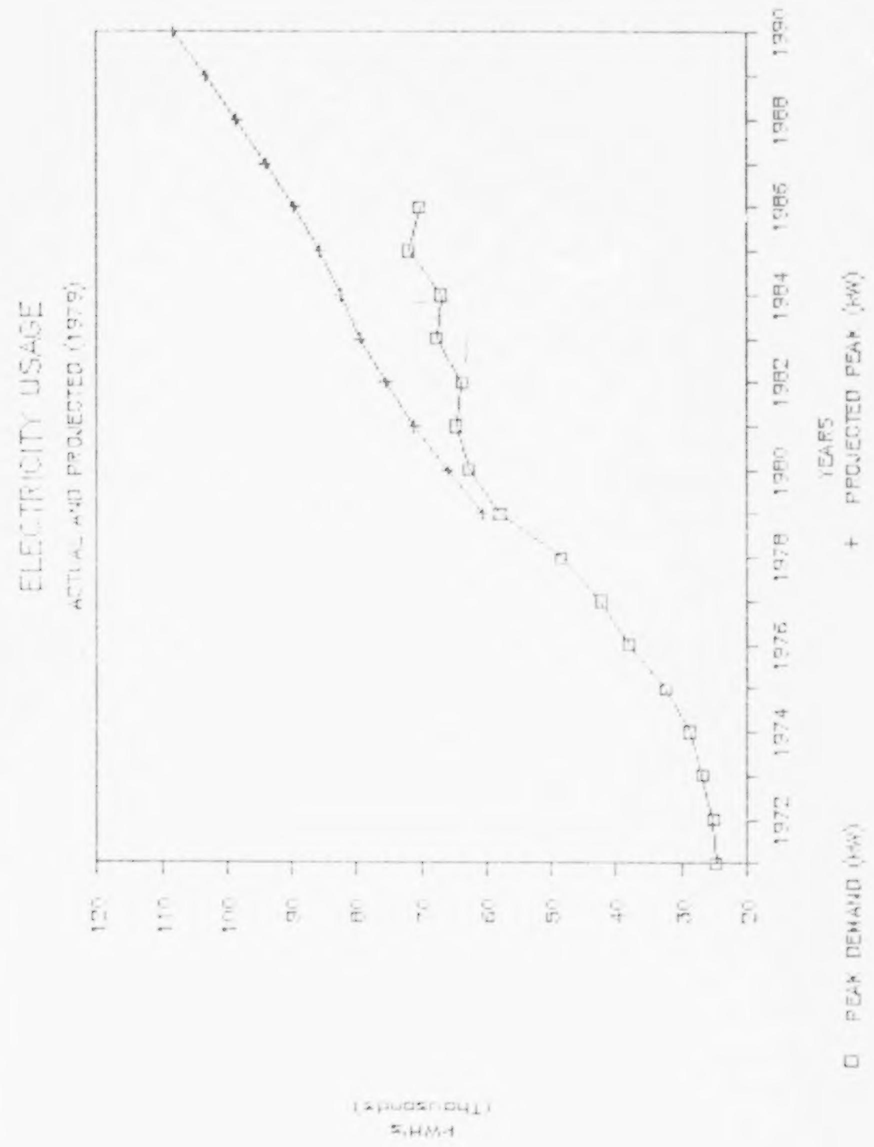

ELECTRICITY USAGE
ACTUAL AND PROJECTED (1979)
KWH'S (Thousands)
120
110
100
90
80
70
60
50
40
30
20
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
YEARS
□ PEAK DEMAND (KW)
+ PROJECTED PEAK (KW)

Exhibit D

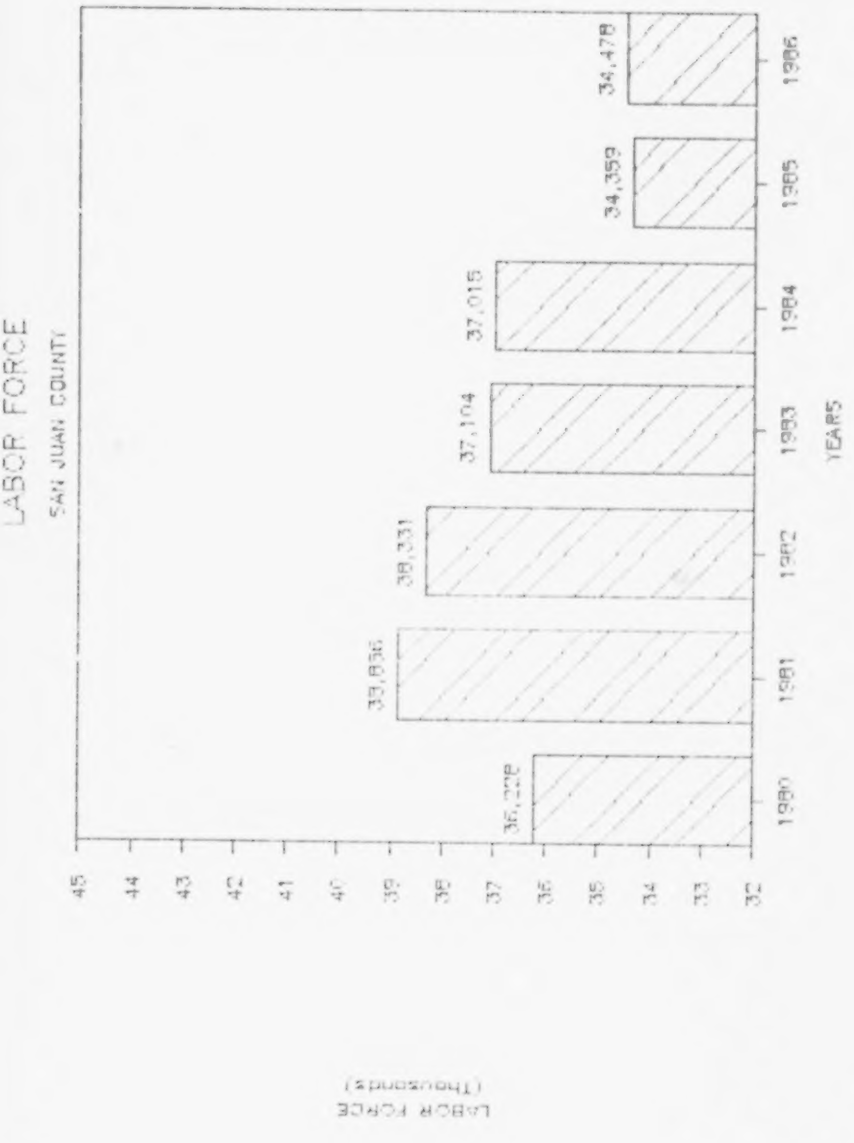

LABOR FORCE
SAN JUAN COUNTY
LABOR FORCE (Thousands)
45
44
43
42
41
40
39
38
37
36
35
34
33
32
36,228
38,836
38,331
37,104
37,015
34,359
34,478
1980
1981
1982
1983
1984
1985
1986
YEARS

Exhibit E

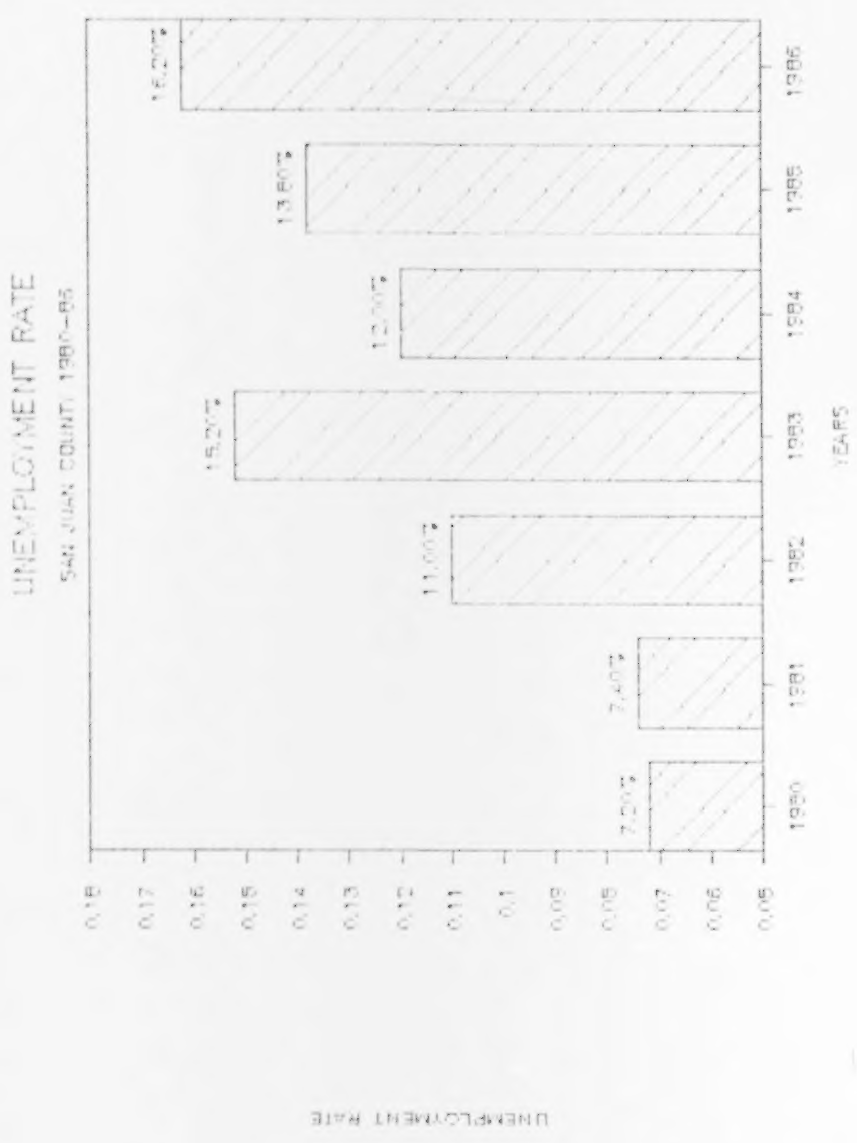
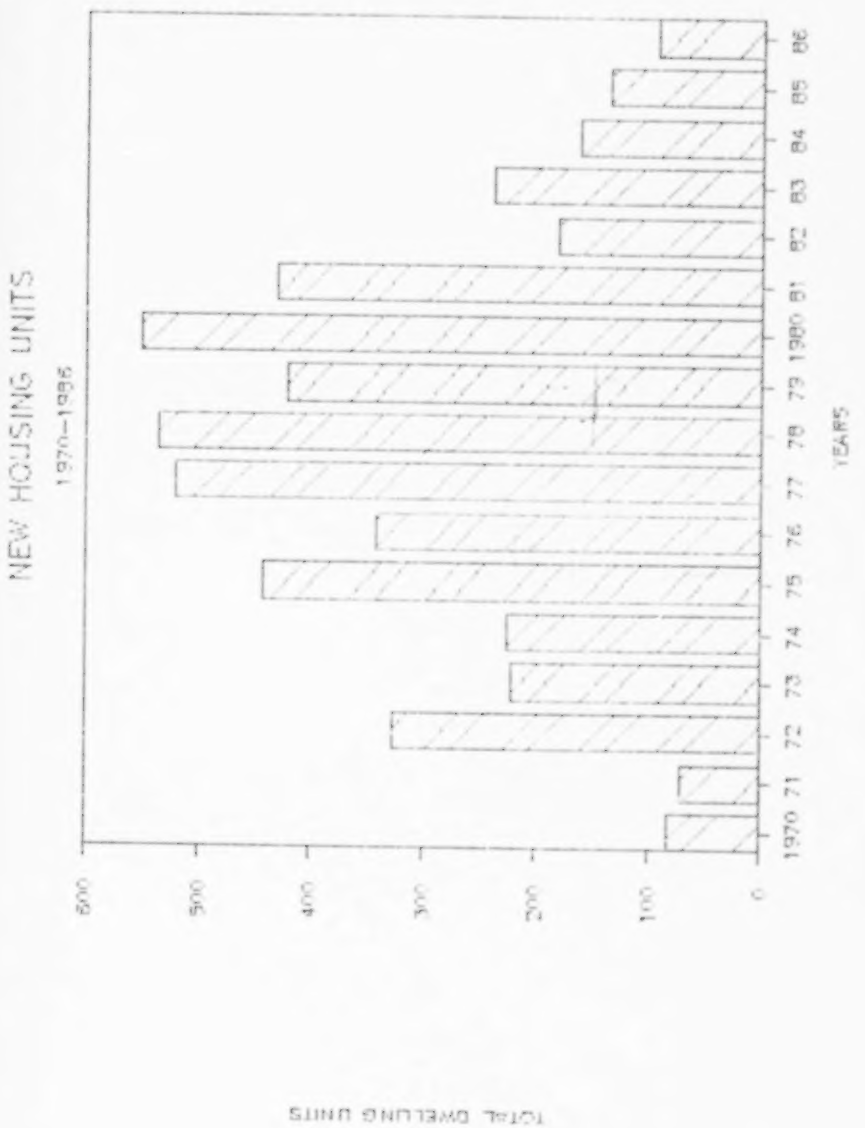

UNEMPLOYMENT RATE
SAN JUAN COUNTY 1980—85
UNEMPLOYMENT RATE
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
0.09
0.08
0.07
0.06
0.05
7.20%
7.40%
11.00%
15.20%
12.00%
13.80%
16.20%
1980
1981
1982
1983
1984
1985
1986
YEARS

Exhibit F



NEW HOUSING UNITS

1970–1986

Exhibit G

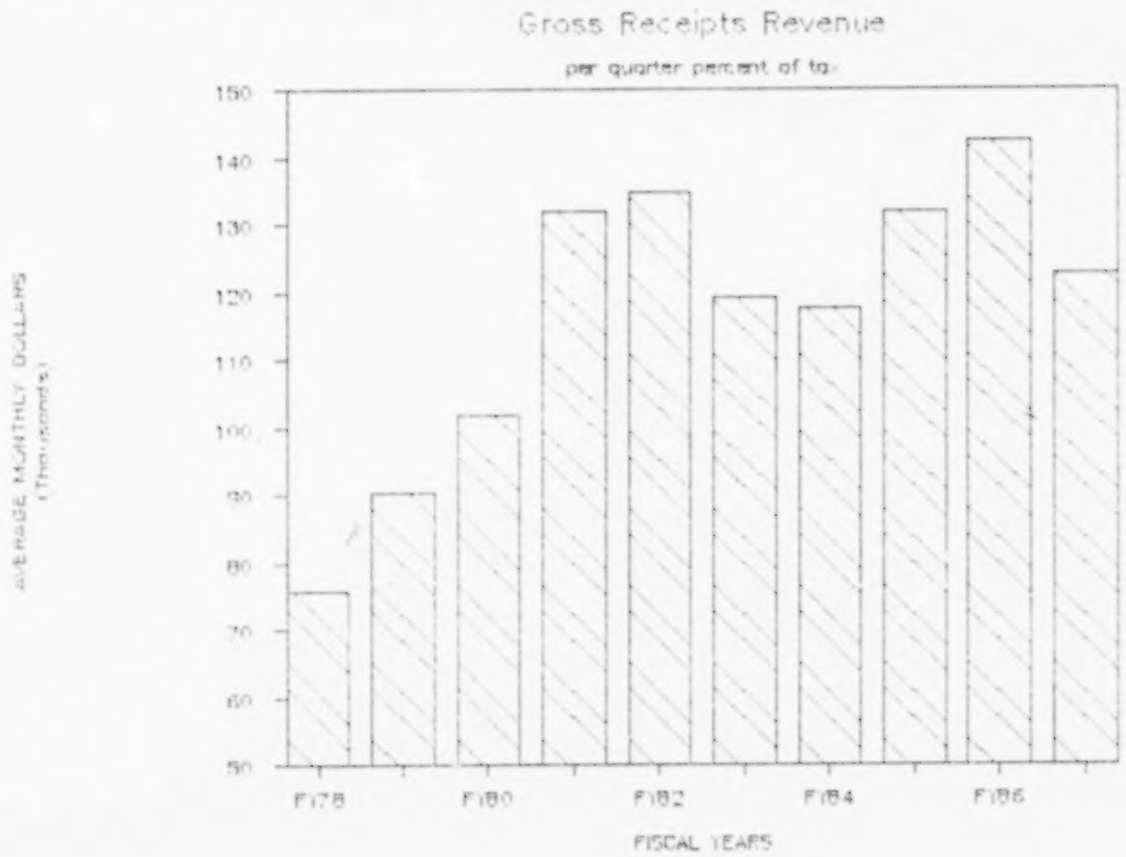
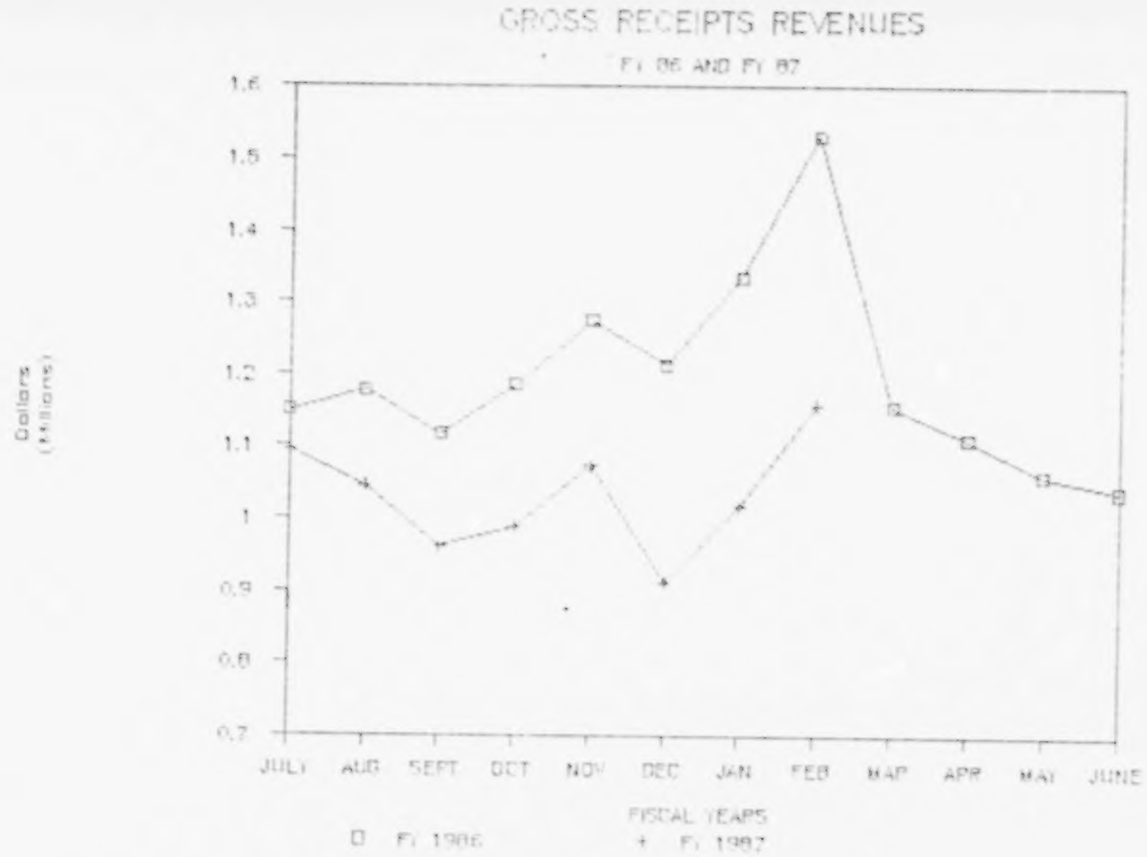

Gross Receipts Revenue
per quarter percent of tax
AVERAGE MONTHLY DOLLARS
(Thousands)
150
140
130
120
110
100
90
80
70
60
50
FY78
FY80
FY82
FY84
FY86
FISCAL YEARS

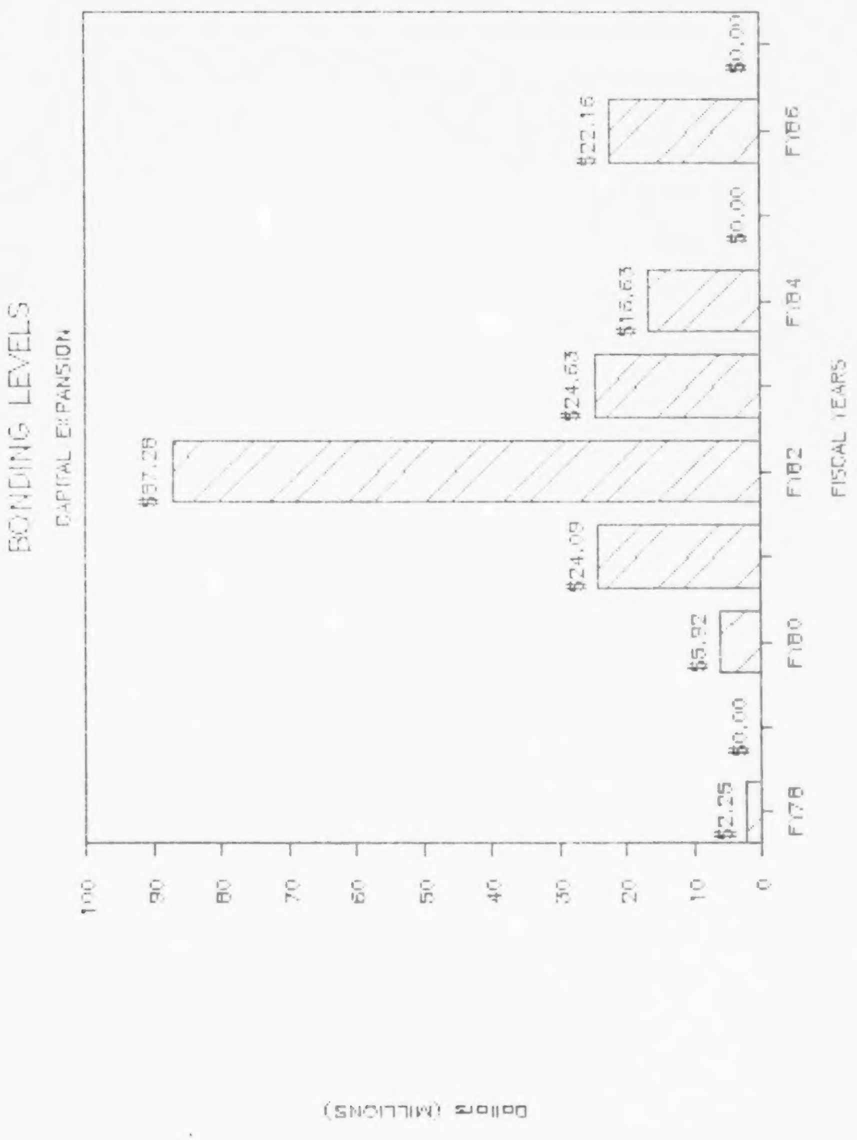
Exhibit H



GROSS RECEIPTS REVENUES

FY 86 AND FY 87

Exhibit I


BONDING LEVELS
CAPITAL EXPANSION
Dollars (MILLIONS)
100
90
80
70
60
50
40
30
20
10
0
$2.25
$0.00
$5.92
$24.09
$87.28
$24.63
$16.63
$0.00
$22.16
$0.00
FY78
FY80
FY82
FY84
FY86
FISCAL YEARS

Senator BINGAMAN. Thank you very much. I appreciate the testimony of both of you. I think it was excellent. Did you have any questions?

Senator DOMENICI. No. Just thank you very much.

Senator BINGAMAN. Our final witness on the earlier list, would be Bob Harbor, who is the vice president of El Paso Natural Gas. Bob also testified at our hearing in Hobbs, and we appreciate him being here. Thank you very much.

STATEMENT OF ROBERT N. HARBOR, VICE PRESIDENT, EL PASO NATURAL GAS CO.

Mr. HARBOR. Thank you Mr. Chairman, Senator Domenici. I approach the podium with some trepidation. I was noticing that no one has left, and I'm the last witness. I wonder what's in store for me. I won't burden the record by repeating what has so eloquently been stated here before by the others giving testimony before the Senators, but rather would like to associate myself with most of the remarks that have heretofore been made, the excellent chronology of the industry given by Al Green, Bob Bayless and others; the problems that the industry is confronting, which Sylvia Little so thoughtfully pointed out plaguing the small independent producers; the decay in our infrastructure, which Tom Roberts pointed out; the loss of the professional, skilled employees, that our industry relies on so heavily.

It's a sad commentary on our business when probably a larger staff of engineers and geologists can probably be found on the sales floor of Sears, Roebuck down in Albuquerque.

Bill LeMay mentioned that there was a rig working somewhere out here in the basin. Bill, I understand, is drilling a water well. There are some things, however, that are unique to the pipeline business, which is the business that El Paso is engaged in.

I will spend a few moments highlighting the issues that are confronting us. As most of you know, the natural gas industry has historically been highly regulated from the wellhead to the burner tip. Regulation, unfortunately, usually trails reality. As a result, the natural gas industry has swung from the severe shortages of the 1970's to present day surplus. The gas supply surplus in El Paso's service area has been made worse by the precipitous decline in the market for natural gas. Some of that, of course, has been generated as a result of efficiencies that have been realized because of the high cost of energy, which we had a few years back. However, it has all contributed to the reduced demand for our product. The reduced market demand today largely results from the increased availability of nuclear and hydroelectric power.

Most of you know several new nuclear plants have been brought online, one most recently out in Arizona and several out in California, most recently the Diablo Canyon, which is a PG&E powerplant. We've also been plagued by some of the vagaries of the weather. Northern California has had very wet, cool weather in the past few years, contributing to a high snow pack and the resulting high run-off.

That hydroelectric power is the first power that's produced. They spill that water over those dams out there and generate hydroelectric power, and it backs out on a BTU for BTU basis natural gas. And, in addition, we've had unseasonably warm weather out in California, which is our principal market area. And as a result of falling oil prices, there has been some fuel switching from natural gas to lower priced fuel oil. And as some of the speakers before me have mentioned, we've also from time to time—have to be consistently vigilent in this respect—suffered from unfair competition from Canadian gas. To further complicate the already difficult economic situation, the industry is undergoing a structural change as well.

Recent orders of the Federal Energy Regulatory Commission have radically changed the national natural gas business, transforming the pipeline from its traditional role and greatly increasing its business risks and, I might add, the risks of the producers.

Foremost among these changes have been Orders 380, 436 and 451. At least two of these orders I would like to dwell upon a minute, if I may. Order 380 was the first of the orders. It had the effect of abrogating the pipelines' contractual right with the distributor customers to collect through a "minimum bill" a portion of its cost of standing ready to serve the customers' needs day in and day out 365 days a year, year in and year out.

This order undercut the traditional financial relationship between the pipeline and its customers, which had heretofore underwritten the pipelines' ability to acquire, aggregate and hold in inventory the long-term gas supplies required to meet its customers' future market demands.

In effect, Order 380 left the pipelines with all of the risks—and, I might add, the producers—associated with the inventories that they have put together over many years to enable them to meet their service obligations.

More recently the FERC issued Order 343, which established a system of open access transportation for interstate natural pipelines. Simply stated, Order 436 permits pipeline customers to unilaterally sever their contractual obligation to buy gas from the pipeline supplier in favor of gas supplies from other sources—most recently they are using spot sources—and require that the pipelines transport these other supplies to the market. You might say we're caught in the worst of both worlds, with an obligation to serve and retain an inventory of gas for customers who no longer have any obligation to purchase.

This, of course, is a tremendous windfall for our customers, who have the best of both worlds. In effect, pipelines and the producers have been left "holding the bag." Thus far the FERC has done nothing for either, leaving them to try to rearrange this relationship and work out their differences as best they can through negotiation and, sad to say, through litigation. It seems that about the only growth industry we might have here in New Mexico is the industry of the judiciary.

El Paso has successfully negotiated a mutually satisfactory resolution to many of the take-or-pay problems and other contract differences with many of our producers, and we're in the process of trying to do so with others. Nonetheless, the problems of supply contracts entered into before the FERC's orders reduced the pipelines' merchant role are without a doubt the largest unresolved issues confronting the natural gas industry.

This is the principal obstacle standing in the way of a workably competitive commodity market for natural gas and open access transportation through the national pipeline grid. Recent indications that the FERC has recognized the severity of the take-or-pay problem are encouraging. However, the specific approach which was discussed at the most recent FERC meeting, and which a majority of the commissioners apparently now support, was disquieting at best. As we understand the proposal, the pipelines must agree to bear at least 50 percent of prudently incurred take-or-pay buy-out or buy-down costs in order to directly bill their customers for any amount. Again, the pipeline and the producers have been left out in the cold. El Paso views this proposal with alarm and considers it rather an arbitrary and inappropriate approach to the problem.

Prudently incurred costs, we feel, should be fully recoverable on most customers on whose behalf the pipeline's acquired the long-term gas inventories, but who are not now taking them. A little known fact is that the pipeline makes not one penny off of the gas it acquires and holds in inventory. It's strictly a flow-through item. Pipelines make this money in the traditional utilities sense, through its investment and physical plant, earning a cost-of-service right of return on that investment. To identify the recent FERC orders and pipeline take-or-pay as the largest of the pipeline problems, it does not mean that there are not others. There are. Most occur because our natural gas pipeline systems are simply not designed or equipped to perform the functions that they are now called upon to perform.

El Paso is now attempting to determine that these operational problems that have occurred as a result of open access carriage can be properly adressed. We don't quite know whether it's a temporary phenomena associated with periods of abnormally cold weather—the pipeline is called upon to balance back and forth between spot supplies and our system supply gas—or whether it's the result of a rectifiable lack of coordination between shippers and suppliers; or there is the possibility that this is a deliberate attempt by some shippers and suppliers to swing on El Paso's gas sales in an effort to arbitrage in a time of rapidly fluctuating spot prices.

We're checking into all of these things. In order to deal with the entry of low cost spot gas supplies into our market area, El Paso has moved vigorously to stay competitive with our own supplies. Over the last 3 years we've had to reduce our work force by approximately 30 percent, perhaps a little bit more than that. That comes as something of a misfortune to the community in which we reside, as well as heartbreak to ourselves.

It's not something that we look forward pleasantly to do. But in order to stay competitive, we really have had no choice. It erodes the payrolls that the communities depend upon. It also erodes the tax base that school districts and taxes jurisdictions have relied upon over the years to take care of the Government-funded programs. In addition, we're upgrading and modernizing our system in every way we can to obtain the most efficient use of our assets. We are constantly reviewing our operation in light of the changing nature of our business and our role as transporter to assure we remain competitive.

In addition to assuring efficient operations market conditions also require that we be attentive to gas costs. And, here again, this is a mixed bag for the producer. We have exercised market out under gas purchase contracts where we have the rights to do so, including those contracts with our affiliated company, Meridian Oil.

I realize--I might add we were the first to market out when supplies tightened during the January-February period. We did ratchet the prices up to the producers. But within the last week or so, as I understand it, we have had to ratchet them back down by about a nickel. We have offered to release the producers who would be otherwise shut in for lack of market for El Paso's sales gas to sell their gas in the spot market, and a great many of them have chosen to avail themselves of this option.

We have adopted a system of purchasing and producing gas on a least cost by pool basis, and we have aggressively sought out markets for our system supply gas. The market is becoming more and more skewed toward transportation and away from sales gas; so much so, in fact, that El Paso's ability to take so-called nonswing casinghead gas, gas produced in connection with oil, is now threatened. Not to take this gas, of course, would cause oil production to be shut in, and we're now working with our major customers, principally out in California, to try to arrange for a minimum level of takes to ensure that this does not happen. These negotiations were going on last week. I've checked on it over the weekend.

I understand they met with some success. Those meetings also included the California Public Utilities Commission. As far as I know, however, the arrangements have not been finalized. We remain concerned that our customers are not recognizing the true long-term costs associated with over-reliance on the spot market, and to look into the problem El Paso has commissioned a study by Charles River Associates of Boston.

In this connection, Mr. Chairman, out here in New Mexico we're used to doing business on a more casual basis. If a producer or pipeline has a problem, they've been able to go up to one another and say, "Look, fellow, what you're doing to me is not in your best interests and over the long-term you're going to be hurt," and expect some reasonable understanding of that. In California I'm not sure we've reached that, so we're trying to approach it on an intellectual level by commissioning this study. Maybe we can get some attention by that.

The study did indicate that buyers in the markets where there is a choice between long-term and spot purchases have traditionally selected a mix of two-thirds long-term gas and one-third spot. Out in California I think we're going to find that that has been substantially reversed. It's about two-thirds/one-third in favor of spot supplies.

El Paso feels that the failure to learn from the historical buying practices of other commodity markets, such as were studied in the Charles River study, could mean sharply increased costs for the natural gas consumers in the future. Quite frankly, we do not think that our customers' present over-reliance on spot—unreliable spot supplies—many of them purchased from off our system, not from the New Mexico or traditional Texas/Oklahoma source that are produced by El Paso, but from as far as away at the gulf coast—we don't think that that's either responsible or substantial over the long-term. All of the aforementioned regulatory changes at FERC have triggered similar actions by state regulatory bodies. Specifically, the California Public Utilities Commission, the CPUC, is now conducting hearings to implement its decision on the reconstruction of the California natural gas industry. The CPUC is proposing to divide the market into core and noncore segments.

The core segment would be comprised primarily of residential and small commercial users; and noncore of large commercial, industrial and electric generating users having the ability to switch to alternate fuels. The noncore customers would be responsible for going out and buying its own natural gas; and these people heretofore have relied pretty much on local utilities to make those supplies available. This system, of course, will institutionalize the spot markets. It also holds the prospect of developing a more reasoned and rational approach to recognizing the value of the long-term gas supplies than we're now experiencing.

One of major issues that stands in the way of the fair and rational market is unfair competition through the use of tilted rate designs. I'll not belabor going into the technicalities of this; but El Paso and New Mexico producers have been victimized by this practice, particularly with respect to the use of the "as billed" mechanism for pricing gas imported from Canada. The FERC is to be commended for its recent decision in the Natural Gas Pipeline of America case, where it effectively held that rate designs for pricing Canadian gas by U.S. pipelines to U.S. consumers should be no different than those utilized in pricing U.S. gas to U.S. consumers. We know that both of you, Senator Bingaman and Senator Domenici, have already expressed to the FERC that they stand firm on that decision; and we urge you to keep that up. Further, the job is not done until the California PUC implements PG&E's purchasing practices to properly recognize the Canadian "as billed" costs in PG&E's rates and practices, otherwise the El Paso gas goes to California competing go on an artificial basis. On a more positive note, there are several things which can be done to place more New Mexico produced gas on the market.

I would first call to your attention the application filed with the FERC by El Paso and Transwestern Pipeling Co. for approval of the Mojave pipeline project. Mojave will be a new pipeline tied to the existing El Paso and Transwestern systems in Arizona and extending into the Kern County areas of California and providing service to the rapidly developing enhanced oil-recovery market. This is the largest developing natural gas market in the country and offers the prospect of an additional 600 million cubic feet per day of market potential. There are also opportunities for moving the gas through the creation of producer cooperatives. However, congressional action providing for limited antitrust exemptions is probably required to ensure that this activity can be successfully implemented. The co-op arrangements would be particularly beneficial as long we have to operate under the system of access carriage. The small producers could use the cooperative to aggregate their supplies into marketable blocks. We heard Mrs. Little say that SoCal would only take bids on blocks of 10,000 cubic feet or more. This would in some measure help to solve that problem. Finally, gas markets could be improved by removing the existing marketing restraints imposed by the Fuel Use Act and incremental pricing—and I'll include the windfall profits tax in there, even though that's more oil related than natural gas. Anything that would help the oil industry would help natural gas. An outright repeal of these provisions would ensure that natural gas could compete in the market place strictly on the basis of price.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Harbor follows:]

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

Statement of Robert N. Harbor
On Behalf Of
El Paso Natural Gas Company

Farmington, New Mexico
March 2, 1987

Mr. Chairman, members of the committee, my name is Robert N. Harbor, Vice President of El Paso Natural Gas Company. I appreciate the opportunity to appear before you today.

El Paso Natural Gas Company is an interstate pipeline company purchasing and transporting natural gas from the major gas supply areas of Texas, Oklahoma and New Mexico to markets in Texas, New Mexico, Arizona, Nevada and California. Sales and transportation services to markets in the state of California account for approximately 80% of our business.

The natural gas industry has historically been pervasively regulated from the wellhead to the burner tip. Regulation unfortunately usually trails reality. As a result the natural gas industry has swung from severe shortages in the 1970's to the present day surplus.

The gas supply surplus in El Paso's service area has been exacerbated by a precipitous decline in the market for natural gas. Reduced market demand largely results from the increased availability of nuclear and hydroelectric power, unseasonably warm winter weather, and some switching from gas to lower priced fuel oil by industry and electric utilities.

To further complicate an already difficult economic situation the industry is undergoing structural changes as well.

Historically, El Paso and other interstate pipelines have primarily performed the so-called "merchant role"; buying natural gas in the field, processing it to pipeline quality, transporting it to the market place and selling it to local distribution companies and to direct end users.

Following the gas shortages of the 1970's, the wellhead price provisions of the Natural Gas Policy Act of 1978 induced producers to return to the business of looking for gas. El Paso and all other interstate pipelines aggressively competed for the new supplies to restore their depleted supply inventories.

Recent orders of the Federal Energy Regulatory Commission have radically changed the natural gas business, transforming the pipeline's role and greatly increasing its business risks. Foremost among these are Orders 380, 436, and 451.

Order 380 abrogated the pipelines' contractual right with its distributor customers to collect th.ough a "minimum bill" a portion of its cost of standing ready to serve the customers gas needs, day in and day out, 365 days a year.

This action undercut the traditional financial relationship between the pipeline and its customers, which had heretofore partially underwritten the pipelines ability to acquire, aggregate and hold in inventory the long term gas supplies required to meet its customers future market demands. In effect, Order 380 left pipelines with all of the risks associated with the inventories they have put together over many years to enable them to meet their service obligations.

More recently the FERC issued Order 436 which established a system of open access transportation for interstate natural gas pipelines. Simply stated Order 436 permits pipeline customers to unilaterally sever their contractual obligation to buy gas from their pipeline suppliers in favor of gas supplies from other sources and requires the pipeline to transport the other supplies to the market. The pipeline is required to transport the gas for others, even if it reduces the market for gas from its own sources of supply. If a pipeline transports gas for any shipper, Order 436 requires it to be an "open access" carrier for all.

El Paso has been operating under Order 436 since January 1986. Our customers were quick to jump on the opportunity this has presented. Transportation now accounts for substantially more than two-thirds of our total business.

As I said a moment ago, these FERC orders have abrogated the customers' contractual obligations to purchase gas from their historical pipeline suppliers. Ironically, The Commission professes an unwillingness or even an inability to "interfere" with the pipeline producer contract. As a result El Paso is now confronting substantial take-or-pay claims from its producers.

You might say we are caught in the worst of both worlds, with an obligation to serve and retain an inventory of gas for customers who no longer have any obligation to purchase. This, of course, is a tremendous windfall for our customers who have the best of both worlds. In effect pipelines and producers have been left "holding the bag." Thus far, the FERC has done nothing for either, leaving them to try to rearrange their relationships as best they can through negotiation and litigation to work out their differences.

El Paso has successfully negotiated a mutually satisfactory resolution to the take or pay problem and other contract differences with many of its producers and is trying to do so with others. Nonetheless the problems of supply contracts entered into before the FERC's orders reduced the pipelines' merchant role are without doubt the largest unresolved issues confronting the natural gas industry. This is the principal obstacle standing in the way of a workably competitive commodity market for natural gas and open access transportation through the national pipeline grid.

Recent indications that the FERC has recognized the severity of the take-or-pay problem are encouraging.

However, the specific approach which was discussed at the most recent FERC public meeting and which a majority of the commissioners apparently now support was disquieting at best. As we understand the proposal, the pipelines must agree to bear at least 50% of prudently incurred take-or-pay buy-out or buy-down costs in order to directly bill their customers for the remaining costs. Alternatively, pipelines could seek to recover all of such costs, but only through the commodity portion of such rates which would drive up such rates, thus making their sales gas even less competitive with low priced spot gas. El Paso views this proposal with alarm and considers it an arbitrary and inappropriate approach to the problem. Prudently incurred costs should be fully recoverable from those customers on whose behalf the pipelines acquired their present long-term gas inventories, but who are not now taking that gas.

Another recent FERC order which bears mention is Order 451 which give producers the unilateral right to ask for an increase in price, up to the maximum price allowed for post 1974 NGPA section 104 gas, or, absent agreement with the purchaser, obtain permanent release from the contract. Again this would be accomplished without reducing the pipelines obligation to serve its customers.

To identify the recent FERC orders and pipeline take-or-pay as the largest problem does not mean there are not others. There are. Most occur because our natural gas pipeline systems were not designed or equipped to perform the functions they are now called upon to perform under open access transportation.

For example, as the volume of transportation service has grown, and particularly over the last few months, El Paso has encountered certain serious and recurring operational problems relating to the control of its pipeline system. Specifically El Paso has discovered that nominations of transportation volumes by shippers on its system, and actual deliveries by suppliers to these shippers, are often not synchronized. Thus, El Paso is receiving information that scheduled transportation volumes are being tendered and delivered into the system when actual measurement does not verify or confirm the shipments. El Paso's existing control systems were not designed for these confirmation purposes. The controls at present are not capable of permitting El Paso to confirm on a real time basis that the scheduled transportation volumes by various interest owners at each of approximately 17,000 receipt points each day are in fact actually being delivered into the system, reasonably contemporaneously with the scheduled redelivery of those volumes out of the system. When parties do not perform, our customers continue to look to El Paso to make good the untendered deliveries from its own system supply. Because of low sales from system supply and high transportation volumes, balancing these volumes becomes very difficult.

El Paso is now attempting to determine if these operational problems (which have been serious enough on occasion to threaten El Paso's ability to render reliable sales and transportation service) are temporary phenomena associated with periods of abnormally cold weather, the result of a rectifiable lack of coordination between shippers and their suppliers, or are related to deliberate attempts by some shippers and/or their suppliers to "swing" on El Paso's sales gas in an effort to "arbitrage" in a time of rapidly fluctuating spot gas prices. Further, and in any event, El Paso has already committed several million dollars to initiate a program to permanently and substantially upgrade its own system control capabilities through installation of additional real-time telemetry equipment, and continues to review other possible remedial measures.

El Paso's shipper and sales customers are generally aware of El Paso's operational problems, and that El Paso will require their cooperation in developing a workable, cost-effective solution. El Paso believes that such a solution can be achieved, but only if all parties are willing to cooperate.

In order to deal with the entry of low cost spot gas supplies into our market area El Paso has moved vigorously to stay competitive with its own supplies. Over the last three years we have reduced our workforce by approximately 30%. We are upgrading and modernizing our system to obtain the most efficient use of our assets. We are constantly reviewing our operations in light of the changing nature of our business and our role as a supplier and transporter to assure that we remain competitive.

In addition to assuring efficient operations market conditions also require that we be attentive to gas costs. We have exercised market out under purchase contracts where we have the right to do so including those contracts with our affiliated company, Meridian Oil. We have offered to release producers who would otherwise be shut in, for lack of market for El Paso sales gas, to sell their gas in the spot market, and a great many have chosen to avail themselves of this option. We have adopted a system of producing our gas on a least cost by pool basis and we have aggressively sought out markets for our system supply gas.

All in all I believe we have been able to maintain the market share traditionally served by the El Paso system through a combination of transportation gas (including predominately released gas) and traditional system supply gas. The market, however, is becoming more and more skewed toward transportation and away from sales gas, so much so in fact that El Paso's ability to take so called "non-swing" casinghead gas is now threatened. Not to do so, of course, would cause oil production to be shut in. We are now working with our major customers to try to arrange for a minimum level of takes to insure that this does not happen.

We remain concerned that our customers are not recognizing the true long term costs of over-reliance on the spot market. To look into this problem El Paso commissioned a study by Charles River Associates of Boston. The study indicates that buyers in commodity markets where there is a choice between long-term and "spot" purchases have traditionally selected a mix of two-thirds long-term for price and supply security and one-third short-term or more economical purchases (with variation from one market to another). These buying practices were made "notwithstanding significant premiums for the long-term supplies," the study shows. In our market area today, our customers are buying significantly less than one-third of their supplies as long-term gas and the rest as spot, a much higher reliance on the spot market than the Charles River Associates study noted for purchasers in other commodities markets.

The study showed that spot market prices rose to much higher levels above the price for long-term supplies during periods of scarcity, periods foretold by the present day decline in natural gas exploration and development. El Paso feels that failure to learn from the historical buying practices of other commodity markets could mean sharply increased costs for natural gas consumers in the future. Quite frankly, we do not think that our customers present over reliance on unreliable spot supplies is either responsible or sustainable over the long term.

Natural gas is in a period of excess deliverability which has led to a lack of supply development. Drilling is at an all-time low and the country is using up its developed inventory. The price of future new supplies will likely be much higher than the present spot price if proper consideration is not given to producers who have long-term supplies.

All the aforementioned regulatory changes at the Federal level have triggered similar actions by state regulatory bodies. Specifically, The California Public Utilities Commission is now conducting hearings to implement its decision on the restructuring of the California natural gas industry. The CPUC is proposing to divide the market into core and noncore segments.

The core segment would be comprised primarily of residential and small commercial users, while the noncore would be comprised of large commercial, industrial and electric generating users having the ability to switch to alternate fuels. Essentially the noncore consumers would be held responsible for acquiring their own supplies while the core consumers would be supplied by the local distribution company. Certain noncore customers could, at their option, elect to be served by the local utility. The gas supply portfolio of each category will be made up of both long term and spot supplies. This system will institutionalize the spot market but also holds the prospect of developing a more reasoned and rational approach to recognizing the value of long term gas supplies than we are now experiencing.

One of the major issues that stands in the way of a fair and national market is unfair competition through the use of tilted rate designs. El Paso and the New Mexico producers have been victimized by this practice, particularly with respect to the use of the "as billed" mechanism for pricing gas imported from Canada. The FERC is to be commended for its recent decision in a Natural Gas Pipeline of America case where it effectively held that rate designs for pricing Canadian gas by U. S. pipelines to U. S. consumers should be no different than those utilized in pricing U. S. gas to U. S. consumers. We ask that you urge the FERC to stand firm on this decision on rehearing. Further, the job is not done until the California PUC implements PG&E's purchasing practices to properly recognize the Canadian "as billed" costs in PG&E's rates and sequencing practices.

On a more positive note, there are several things which can be done to place more New Mexico produced gas in the market. I would first call to your attention the application filed with the FERC by El Paso and Transwestern Pipeline Company for approval for the Mojave pipeline project. Mojave will be a new pipeline tied to the existing El Paso and Transwestern systems in Arizona and extending into the Kern County areas of California to provide service to the rapidly developing enhanced oil recovery market. This is the largest developing natural gas market in the country and offers the prospect of 600 million cubic feet per day or more of market potential. Of the projects competing for this load, Mojave offers the best and maybe the only hope for selling more New Mexico produced gas in this promising market.

There are also opportunities for moving more gas to market through the creation of producer cooperatives.

However, congressional action providing for limited antitrust exemptions is probably required to insure that this activity can be sucessfully implemented. The co-op arrangement would be particularly beneficial to small producers who could use the cooperative to aggregate their supplies into marketable blocks.

Finally gas markets could be improved by the removal of existing marketing restraints imposed by the Fuel Use Act and incremental pricing. An outright repeal of these provisions would ensure that natural gas could compete in the market place strictly on the basis of price.

Thank you Mr. Chairman. That concludes my statement.

Senator **Bingaman**. Thank you very much. Let me ask one question. Maybe you could comment briefly on this affiliates problem that we hear about in California and the impact that that has on the producers here in the San Juan Basin.

Mr. **Harbor**. I think a little historical perspective would be required to make it understandable. When pipelines were declared open access transporters—and El Paso accepted early on that responsibility—our—and even before that I might add our largest company, Southern California Gas, and followed shortly by PG&E and Southwest Gas, approached us about going behind the pipeline and buying gas on the spot market. Due to the nature of our contracts, we felt we had little option but to let that procedure take place. They did so. And at first I think it was anticipated—and SoCal, I believe, has stated publicly that they had expected maybe 250, 350 million cubic feet a day bid into that market. Instead about 1.2 billion cubic feet was bid into that market. And obviously a lot of it was coming from off system.

El Paso was having to shut in supplies on its own pipeline system. We felt that we have had to do something to try to get that gas back online. The price that was being—which our gas was being priced would not compete with the spot market gas, which was being sold at distressed prices. So we felt the quickest and easiest way we could respond to that would be to form a marketing affiliate, which we call El Paso Gas Marketing, and go to our producers and tell them, "This month we will let you out of your contract with El Paso and allow you to bid your gas into the spot market provided you will give us some relief on take-or-pay and through El Paso Gas Marketing will aggregate the supplies and at no cost to you bid that gas," which we did for some several months. And after a while we were rather roundly criticized for our role as a marketer. And we felt by this time maybe the producers have learned to put their own deals together and they were beginning to understand what was going on out there and making their own contacts with end-users and with utilities out in California. And the last thing El Paso wanted was to be in more trouble with our producers than we already were. So we backed out of that business, and we were pretty roundly criticized for backing out of it. But that's pretty much where we are right now. El Paso Gas Marketing, of course, still exists; but it does not play the role we once played in aggregating those supplies. Most of that business, however, is still going forward; but at this time with the producers dealing directly with the marketplace.

Senator **Bingaman**. Thank you very much. Pete?

Senator **Domenici**. Let me ask this general kind of question. I have a constituent that says, "Six months ago I was selling *x* amount of natural gas to El Paso, *x* number of wells. Today 90 percent has been canceled; or in some instances, they are buying none." Just as a general principle, most of my constituents are saying, "I have to find out whether I'm being treated fairly," that kind of scenario. And there are more scenarios than that. Are you prepared to give us a general way that you go about cutting back or restraining the purchase or even causing some to stop producing out of their wells for you?

Mr. **Harbor**. I think the answer to your question, Senator Domenici, somewhat follows on the previous question. The market is restrained. It's limited; it's only so big. To put it in perspective, El Paso's pipeline system was designed to transport and did transport, up until a few years ago, about 4 billion cubic feet of gas a day. Presently—well, I won't use January or February as an example. We were moving about 3 billion cubic feet a day. But on the average we were moving about 2.6 billion cubic feet per day. That shows you the shrinkage in the market. Now add to that gas coming from off the system that's displacing gas that's on the system, and you further exacerbate that problem. And then add to that the fact that PG&E and SoCal, our larger customers, as well as Southwest Gas, are going into the spot market and picking up their gas supplies. Probably the best example I could give you on that is that there has been at least one period very recently, within the last few weeks, where El Paso was moving only about 100 MCF a day to PG&E as sales gas, gas that they were purchasing from us. Our contract with PG&E is 1,100.

Senator **Domenici**. 100 versus 1,100?

Mr. **Harbor**. 100 versus 1,100. That's the thing that's been causing us to shut this production in out here. It was so severe, as I mentioned in my testimony, that if they took it any lower and held us any longer for any sustained period of time, we would have had to shut in casinghead gas, which would have shut in oil production. That is an untenable thing to most state legislators; and, of course, the producer's behind that. But that's where we are. El Paso's sales gas has absolutely been turned out of the marketplace. Now, the options are—what do we do? Do we go to the producer and market out to an even lower level to try to get this price of gas down to where it will compete with Canadian gas? Right now Canadian gas is entering the market in northern California at 38 cents less than El Paso gas. That's what the competition is. Therefore, PG&E's line taking Canadian gas is pretty well loaded up. I would say it's their corporate intention to keep it loaded up. And it's a pretty tough situation. But as our gas gets backed out, we have to shut in production. There is no market for it.

Senator **Domenici**. Are you prepared—and you've already said it, I think—can you tell us again in no way is there any—when you have to shut in and cut back, in no way are you giving any preference to El Paso-owned production?

Mr. **Harbor**. We have very studiously avoided favoring our own affiliates. At one time we produced gas—so as not to discriminate in any respect, we produced gas, too, in New Mexico proportionately to Texas and Oklahoma. We have had to back away from that to some extent. We have to produce a least cost to pool basis to get our price down. We have to get the price down to make it move into the marketplace. But with respect to El Paso favoring its own affiliates, we do not do that.

Senator **Domenici**. And you say that to this committee subject clearly to scrutiny on our part if we would like to conduct such an investigation?

Mr. **Harbor**. Yes, sir, we do.

Senator **Domenici**. Is it your observation that without the passage of section 501, which would have prohibited that and some other things, that the industry at large is concerned enough about this issue that they are not taking any of their own—any more of their own proportionately of the independents who were their previous suppliers? I'm not asking you to be a squealer; I'm asking you for an observation.

Mr. **Harbor**. I'm not sure I understand the question.

Senator **Domenici**. Are other pipelines doing likewise, in your opinion?

Mr. **Harbor**. Favoring their affiliates?

Senator **Domenici**. Not favoring their affiliates, as you just indicated you're not.

Mr. **Harbor**. That's correct. I think the 501, Senator, as I recall—and I think now I have the gist of your question—was a provision which you introduced in the Congress a few years back to preclude a pipeline from favoring its own affiliates, taking its own production.

Senator **Domenici**. That's correct.

Mr. **Harbor**. And this, of course, was somewhat pointed at the time at Pacific Gas and Electric, which at that time was favoring its affiliates, PFGT, taking gas gown into northern California even though the gas at that time was priced at about $1 more than the El Paso and New Mexico produced gas.

Senator **Domenici**. 501 was introduced for that. It never got adopted into law but it's still commonly known as the 501 section and companies seem to be fearful of it so they are acting as if it had become the law. You go one step further: it's not a question of favoring with prices; you've gone all the way in terms of equity and quantity. My question had to do with do you think the other pipelines are treating natural gas from their affiliates versus other suppliers as you are today?

Mr. **Harbor**. Senator, I couldn't stand here today and tell you that. I simply don't know, so I couldn't speak on behalf of the other pipelines.

Senator **Domenici**. All right.

Mr. **Harbor**. But within the constraints of our production guidelines, that's least cost by pool, the same rules apply to our affiliates that apply to everyone else.

Senator **Domenici**. Thank you.

Senator **Bingaman**. Thank you very much, Bob. We appreciate your testimony. We have run over our time. I have indicated that two people in the audience have asked to make very short statements, and I have told them that we will do that. Tim Duran you had a statement you wanted to make. If you will, just stand where you are and go ahead.

STATEMENT OF TIM DURAN, AZTEC, NM

Mr. **Duran**. I speak for the family plight of the young unemployed oil field worker. Most young unemployed oil field workers here are facing a very serious economic distress. I speak for young unemployed workers, their unemployment checks stopped. They cannot receive unemployment checks for more than 6 months. At first the young unemployed workers do not qualify for food stamps because they have a vehicle worth over $4,500.

If you're a young worker you have to become a worthless bum to qualify for food stamps. You need your food stamps to eat and stay up on your feet to return to work to pay for taxes. When the good car is repossessed with your washing machine, with your dryer and TV set, you qualify for food stamps.

Then and only then you feel like a real bum. From your house far away you have to make at least four trips to the food stamp office to complete application forms. Yes, you bum for rides. You complain to the food stamp state office to no avail.

They tell you they have 30 days to complete your application. Then it takes maybe 40 days to get your food stamps after you apply.

Today you struggle in distress, feeling sad with much pride. Maybe that's why—that's the reason why the roughnecks are not here today. Yes, Senators from New Mexico, you can help the oil field workers to some extent, the ones that are unemployed. Do something soon to relieve the oil and gas industry here, if you can.

Please release the $5 million that we hear about that are allocated to retrain the oilfield workers to do something else. Order the Department of Agriculture to do away with that redtape, such as vehicle restrictions of $4,500 value to qualify for food stamps.

Help the oil field worker to stay on his feet so you can return to work and pay more and more taxes to get this country going. Yes, New Mexico Senators, please help. Please help protect the young U.S. American oil field workers here from further and further exploitation. There will be thousands and thousands of cheap labor, illegal aliens in this area that become legal, card-carrying U.S. workers starting in May 1987 that will be willing to work hard for crumbs. Thank you very much. I'm a disabled American veteran. I spent 2 years in the front lines liberating the Phillipines. I was returned a mental and physical wreck. I'm proud to be an American. I'm a native New Mexican. I am proud to be. And Mr. Bingaman knows me; and I guess Mr. Domenici notice me, too.

Senator BINGAMAN. Carol Cloer has asked to make a short statement, and we're glad to have you here.

STATEMENT OF CAROL CLOER

Ms. CLOER. The gas and oil industries have suffered heavy profit loss in the past few years due to a decline in the market. The future does not look good in the short range. Industrial reaction has been drastic cuts that have been made in manpower, preventative maintenance and safety. The fat had to be cut; the companies must run lean. The industrial result is the cuts have caused increased levels of production to be placed on the remaining staff. Shortcuts on safety are being taken by contractors and production field operators to try and meet increased responsibilities with less funds. Preventative maintenance programs have deteriorated and safety staffs have been cut. Training for safety has lessened. There is a need for cross-training as the remaining employees assume more responsibilities. Life-threatening accidents are eminent, and many have occurred in the San Juan Basin because of the above-outlined conditions. These injuries and deaths will increase as the conditions continue to be in force. The workers have difficulty gaining a voice in this industry to protect their welfare.

Thomas Jefferson said the role of Government is to do for the people what they cannot do for themselves. You represent Government. Some solutions for this industry and for the safety of the workers might be, short range, demand compliance and provide financial incentives to the natural gas and oil industry to provide safety and preventative maintenance; long range, assist the industry to be able to compete with foreign interests by a tax that will allow the industry to become competitive and protective tariffs on competing nations who impose them on us. However, you have heard from many levels of this industry today; do not forget the voice of the worker who's sent into the conditions at the threat of their life. Keep a balance between maximum profit, minimum labor, standing on a pedestal of maximum safety. Thank you.

Senator **Bingaman**. Thank you very much. That will conclude the testimony. Senator Domenici, did you have a final statement you wanted to make before we close the hearing?

Senator **Domenici**. I think only to say thanks again to everyone that's here. I think it's been a very constructive morning. I'm hopeful that in the next few weeks we will be able to gather some additional support from around the country. I've concluded that there are many things we can do and must do, but that our principal mission ought to be for the next six weeks to two and a half months to try to find enough support for an import fee somewhere in the neighborhood of $4 a barrel, variable in nature, where it starts coming off at certain prices. I'm going to continue to work on it and see if I can do something to convince the White House that they ought to help with it, even if it's part of a major budget package as we move through the year. For those who sacrificed to be here, thank you very much. I hope it hasn't been in vain. From my standpoint it hasn't, but I'm only hopeful we can gather some more people to help us with the problem. Thank you, Mr. Chairman, for having the meeting here.

Senator **Bingaman**. Let me say thank you also for making the time and effort to be here. I do think that there are an awful lot of issues competing for attention in Washington, and unfortunately the problems of the oil and gas industry have gotten very little attention in Washington in recent months and perhapsin recent years, so I think this is part of a process of trying to get these items on the front burner and get some recognition both in the Congress and the administration that something has to be done, that we cannot just continue to ignore this situation and assume it will solve itself. It obviously is not solving itself. We have to take some action and do so very quickly. I want to thank you all for being here and thank the organizers for all the extensive effort that went into making this hearing occur today. So, we'll stop the hearing at this point. Thank you.

[Whereupon at 12:22 p.m., the hearing adjourned.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

86-599 E
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OIL PRICE DECREASES:
ILLUSTRATIVE EFFECTS ON U.S. OIL USE, PRODUCTION, AND IMPORTS

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March 24, 1986

ABSTRACT

This report presents illustrative projections of U.S. petroleum use, production, and imports for 1986 through 1990 under certain assumptions concerning oil price decreases and demand and supply price elasticities.

OIL PRICE DECREASES:
ILLUSTRATIVE EFFECTS ON U.S. OIL USE, PRODUCTION, AND IMPORTS

Background

Petroleum prices in the world as a whole and in the United States as well have declined sharply since late November of 1985 -- slowly at first, then rapidly. Average export prices of crude oil (FOB) dropped from about $28 per barrel to about $23 per barrel in late February; prices for crude oil in spot and future markets have fallen below $15 per barrel. In the United States, the spot price of West Texas Intermediate (a "benchmark" crude oil) for delivery within one month has fallen below $13 per barrel; and average pump prices for gasoline are sinking toward $1.00 per gallon. 1/

Such price declines have led to curtailments in actual and planned exploration, development, and production by the U.S. oil industry. 2/ Production from stripper wells (wells producing ten barrels per day or less) and from Alaska's North Slope would tend to be cut first, according to some analysts. 3/

1/ U.S. Energy Information Administration. Weekly Petroleum Status Report. Data for Week Ended February 28, 1986, p. 19; Oil Prices Continue to Fall, The Washington Post, March 7, 1986. p. C8; U.S. Crude Oil Prices Continue to Fall to 1978-Era $13 a Barrel, The Washington Post, March 1, 1986; and Lundberg Letter, LL-PS. February 28, 1986. p.2.

2/ For example, see U.S. Oil Companies Cut Budgets as Crude Prices Continue to Fall, The Oil and Gas Journal, February 24, 1986. p. 25-28, 30, 32.

3/ See, for example, Big U.S. Productive Capacity Cuts Seen If Prices Stay Low, The Oil and Gas Journal, March 3, 1986. p.38; and Mack Wallace. Testimony Before the United States Senate Committee on Finance. February 28, 1986. p. 3-5.

It is also likely that U.S. (and world) use of petroleum will be higher than under previous price levels. Anticipated significant decreases in U.S. oil production and increases in petroleum use would be expected to result in large increases in the absolute and relative level of U.S. oil imports.

Purpose and Scope of Report

This report presents illustrative projections of U.S. oil use, production, and imports for calendar years 1986 through 1990, assuming the average U.S. wellhead price of crude oil falls, alternatively, to $20 per barrel, $15 per barrel, and $10 per barrel in 1986. Prices are assumed to remain at these levels during the projection period. The average U.S. wellhead price of crude oil is defined to be the average for all transactions in which the commodity actually changes hands.

Because it is uncertain how responsive demand and supply will be in the 1986-1990 period, given a price change in 1986, two sets of demand and supply price elasticities are used. 4/ In the "lower" set, demand and supply price elasticities are assumed to be, respectively, -0.2 and +0.2 in 1986, -0.25 and +0.25 in 1987, -0.3 and +0.3 in 1988, -0.35 and +0.35 in 1989, and -0.4 and +0.4 in 1990. In the "higher" set, they are assumed to be -0.2 and +0.2, -0.3 and +0.3, -0.4 and +0.4, -0.5 and +0.5, and -0.6 and +0.6. These sets of demand and supply price elasticities have been selected, on the basis of a

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4/ Price elasticity is a measure of the responsiveness of buyers or sellers to a change in the price of a good or service. For example, if the price of a particular good increases 10 percent, a demand price elasticity of-0.3 would mean that buyers would decrease the quantity they purchase by 3 percent.

range of econometrically-estimated elasticities, so as to more or less bracket the range of most likely outcomes. 5/

Other factors, such as economic conditions, are assumed to be unchanged. This approach was used in order to "capture" only, and as well as possible, the effects of price changes on the quantities of domestic petroleum use, domestic oil production, and U.S. imports of petroleum.

For the purpose of this report and the preparation of projections, domestic oil production is defined to include natural gas liquids (NGLs). NGLs are typically considered to be part of the domestic supply of petroleum.

Results

The lower oil prices fall and the higher the assumed demand and supply price elasticities, the lower will be U.S. oil production and the higher will be U.S. use of petroleum. U.S. imports of petroleum, sensitive to both production and use, increase rapidly as assumed prices decrease and assumed price elasticities increase.

It is projected that a drop in the U.S. wellhead price of crude oil from an estimated average of $24 per barrel in 1985 to $20 per barrel in 1986 would, with no further price change, lead to a 7-10 percent increase in domestic use of petroleum from the 1985 level of 15.7 million barrels per day to 16.8-17.3 million barrels per day by 1990, depending upon the elasticity assumption. (See table.) Domestic production would decrease from an estimated 10.6

5/ The lower 1986 demand elasticity is a weighted average of a number of published estimates for the short run. Estimated supply elasticities are scarce; the higher figure for 1990 is an approximation of a medium term figure from a handful of higher petroleum supply elasticities.

ILLUSTRATIVE PROJECTIONS OF U.S. PETROLEUM USE, PRODUCTION, AND IMPORTS
1986-1990
(millions of barrels per day, except where indicated)

	YEAR	WELLHEAD PRICE PER BARREL	USE	PRODUCTION	IMPORTS	USE	PRODUCTION	IMPORTS
			LOWER ELASTICITIES 1/			HIGHER ELASTICITIES 2/		
	1985	$24	15.70	10.60	5.10	15.70	10.60	5.10
LOWER PRICE CASE	1986	10	17.53	9.36	8.17	17.53	9.36	8.17
	1987	10	17.99	9.05	8.94	18.45	8.75	9.70
	1988	10	18.45	8.75	9.70	19.36	8.13	11.24
	1989	10	18.91	8.44	10.47	20.28	7.51	12.77
	1990	10	19.36	8.13	11.24	21.20	6.89	14.31
	1985	$24	15.70	10.60	5.10	15.70	10.60	5.10
MIDDLE PRICE CASE	1986	15	16.88	9.81	7.07	16.88	9.81	7.07
	1987	15	17.17	9.61	7.57	17.47	9.41	8.06
	1988	15	17.47	9.41	8.06	18.06	9.01	9.05
	1989	15	17.76	9.21	8.55	18.64	8.61	10.03
	1990	15	18.06	9.01	9.05	19.23	8.22	11.02
	1985	$24	15.70	10.60	5.10	15.70	10.60	5.10
HIGHER PRICE CASE	1986	20	16.22	10.25	5.98	16.22	10.25	5.98
	1987	20	16.35	10.16	6.20	16.49	10.07	6.42
	1988	20	16.49	10.07	6.42	16.75	9.89	6.85
	1989	20	16.62	9.98	6.63	17.01	9.72	7.29
	1990	20	16.75	9.89	6.85	17.27	9.54	7.73

1/ Demand and supply price elasticities are assumed to be, respectively, -0.2 and +0.2 in 1986, -0.25 and +0.25 in 1987, -0.3 and +0.3 in 1988, -0.35 and +0.35 in 1989, and -0.4 and +0.4 in 1990.

2/ Demand and supply price elasticities are assumed to be, respectively, -0.2 and +0.2 in 1986, -0.3 and +0.3 in 1987, -0.4 and +0.4 in 1988, -0.5 and +0.5 in 1989, and -0.6 and +0.6 in 1990.

Source: Author's estimates.

million barrels per day in 1985 to 9.5-9.9 million barrels per day in 1990. U.S. imports of petroleum, therefore would rise from 5.1 to 6.9-7.7 million barrels per day.

A drop in the price of crude oil to an average of $10 per barrel in 1986 would, with no further price change, lead to a 23-25 percent increase in domestic petroleum use by 1990--to 19.4-21.2 million barrels per day. Domestic production would decrease 23.25 percent, to 6.9-8.1 million barrels per day. Imports, consequently, would jump to 11.2-14.3 million barrels per day.

In these illustrative estimates, imports would exceed domestic production by the year 1990 under four of the six combinations of price decline and elasticity assumption--involving the declines to $15 per barrel and to $10 per barrel. In one case, $10 per barrel and "high" elasticity, the crossover point would occur as early as 1987. A price drop to $18 per barrel (not shown in the table) under the high elasticity assumption would result in imports exceeding domestic production in 1990.

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OIL IMPORT TAXES: REVENUE AND ECONOMIC EFFECTS

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May 28, 1986

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OIL IMPORT TAXES: REVENUE AND ECONOMIC EFFECTS

INTRODUCTION AND SUMMARY

Projected large Federal budget deficits have led to Congressional interest in possible sources of new revenue, including the imposition of a tax or fee on imported petroleum. The current decrease in oil prices is viewed by some as an opportunity to levy such a tax without causing an increase in petroleum prices to end users.

Supporters of an oil import tax also justify it by the need to reduce U.S. use of petroleum--citing the cost of oil imports (including the social cost) in terms of dollars, uncertainty of supply, and political dependence. Although less oil is being imported than in the late 1970s, imports continue to account for a substantial share of total oil supply in the United States. Proponents argue that an import tax would prevent or minimize a decline in petroleum prices; such a decline would result in a resurgence of overall U.S. petroleum use, reduce the attractiveness of energy-efficient equipment in factories, on highways, and in homes, and curtail incentives for development of alternative energy resources. Some proponents also want to maintain price incentives for domestic oil production.

Those opposed to an oil import tax contend that it will add to inflation or offset any drop in prices, hamper economic growth by raising the costs of living and of doing business, hurt low-income families disproportionately, while boosting oil industry profits, and diminish the international competitiveness of U.S. industry. If additional revenues are needed, in this view, there are fairer and more economically efficient tax options to obtain them.

This report summarizes an analysis of the major economic effects of an oil import tax, presents estimates of the effects on petroleum prices and imports, and presents estimates of the net Federal tax revenues that would result. In particular, it considers the economic effects of a flat tax of $5 per barrel, and $10 per barrel of imported crude oil and refined petroleum products. The dollar amounts chosen are typical of the amounts that have been discussed, and provide a range of effects. A flat tax was chosen largely because of its simplicity; deductions about the effects of other types of import levies can be made relatively easily based on this analysis of a flat tax.

The estimates have been prepared for calendar years 1986 through 1990. The effects described are what would be expected or estimated to occur relative to "base" conditions in the years 1986-1990, and not relative to the present.

ASSUMPTIONS

The estimates of effects on quantities of petroleum used, produced, and imported, and of the effects on Federal revenues are based on a standard economic framework of supply and demand for oil in an international market. To reflect the considerable uncertainty regarding both the path of future prices and the response of foreign oil producers to an import tax, three "base" price scenarios and two assumptions regarding the extent to which a tax would be passed through to buyers have been used.

Initially, two price scenarios -- designated "low" and "high" -- were used; these were based on then-current and anticipated price levels. The ensuing oil price collapse necessitated adoption of an additional scenario with lower prices than the original "low." We have designated this the "new" scenario; the previous "low" and "high" scenarios are designated "A" and "B," respectively. Under the new price scenario, crude oil prices in the United States without an oil import tax are assumed to average $15 per barrel in 1986 and 1987, $16 in 1988, $17 in 1989, and $18 in 1990. Under scenario A, the assumed average prices without an import tax for the same years are $25, $20, $17, $16, and $15, respectively. The corresponding assumed prices under scenario B are $25, $24, $23, $22, and $21. These assumed base prices represent the average of all transactions involving crude oil that actually changes hands. Therefore, in a declining market, the assumed prices for 1986 are higher than the prices currently reported in the news media, which tend to be spot market and futures prices. The authors recognize that the price paths assumed may differ in degree or kind from what appears to be now occurring and/or from the future path. But given the extreme market uncertainty and the difficulty in projecting oil prices, the authors believe the scenarios used are reasonable. Slightly different prices would have relatively small effects on the estimates, particularly if the five-year period is considered as a whole.

It is particularly uncertain how foreign oil producers would respond to an oil import tax and thus difficult to determine how much of an import tax is passed through to buyers. Therefore, two sets of assumptions have been used: 80 percent would be shifted forward; and 50 percent would be shifted forward. The authors believe that this range brackets the most likely outcomes, and is consistent with assumptions used in other studies. For simplicity, the revenue and other estimates under the new price scenario were developed only for a $10-per-barrel tax and with an 80-percent forward-shifting assumption. These choices do not, and are not intended to, indicate the authors' preferences.

SUMMARY OF FINDINGS

Under every combination of tax rate, price scenario, and price shifting assumption used, Federal Government tax revenues would be higher with an oil import tax than without one. A $5-per-barrel tax would increase net revenues by $12.1-$13.6 billion in 1986, and by $12.2-$14.2 billion in 1990. A $10-per-barrel tax would increase net revenues by $22.2-$26.8 billion in 1986, and by $19.1-$25.9 billion in 1990.

An oil import tax would increase Federal tax revenues by three means: first, through the direct yield of the import tax; second, through an increase in receipts from the crude oil windfall profit tax; and, third, through additional corporate and personal income taxes collected from the oil industry. Tax collections from other sources, however, would decrease as a result of the contractionary effect (see below) of an import tax on economic activity. Moreover, that effect and a rise in the general price level resulting from an oil import tax probably would cause Federal expenditures to rise slightly.

Imposition of an oil import tax would tend to raise petroleum prices, spur production of domestically-produced crude oil, decrease the amount of petroleum used in the United States, and sharply cut the amount of oil imported. The tax probably would be largely shifted forward in the form of higher domestic and imported and crude oil and petroleum product prices. Domestic producers would increase their prices to about the level of import prices since imports are the marginal source of petroleum in the United States. Given the assumptions about pass-through, a $5-per-barrel tax would increase crude oil prices by $2.50-$4 per barrel; a $10 tax would increase crude oil prices by $5-$8 per barrel. That part of the tax not shifted forward would be "paid" by sellers of foreign oil, who would receive less per barrel.

Petroleum product prices (e.g., the prices of gasoline and heating oil) would increase by 6 cents to 19 cents per gallon (compared with the base cases), depending upon the product, price scenario, and year.

Based on the economic model and price assumptions used, total domestic use of petroleum would be about 0.3 million to 1.0 million barrels per day lower in 1986, and about 0.4 million to 1.9 million barrels per day lower in 1990. Domestic crude oil production in 1986 would be 0.2 million to 0.7 million barrels per day higher, and 0.2 million to 1.3 million barrels per day higher in 1990. Consequently, imports would be 0.5 million to 1.7 milion barrel per day lower in 1986, and 0.7 million to 3.2 million lower in 1990.

The higher oil prices resulting from an oil import tax would encourage domestic exploration for and development and production of crude oil, especially stimulating demand for oil and gas field services. The many kinds of effects on demand for hydrocarbon-derived products make it difficult to determine without considerable further study the overall consequences for refiners. Petroleum industry marketing operations would be adversely affected by notably lower sales volume resulting from a large tax with a large pass-through.

There would tend to be an increase in demand for natural gas, coal, and electricity, which are substitutable for petroleum to varying degrees in industrial, commercial, and residential energy use. This, in turn, would tend to raise the prices of these energy forms. Higher prices for conventional types of energy would create more incentives for commercial development of solar energy, synthetic fuels, gasohol, and other alternative energy resources.

An oil import tax, which causes oil prices to increase, tends to have some undesirable macroeconomic and distributional effects. Economic activity would grow slower, or perhaps even decline, in the short run. In the long run, the rate of economic growth would recover, but some output (and income) would be permanently lost. The unemployment rate would tend to be higher; and the rate of inflation would be higher.

Real income would tend to be redistributed to some extent from foreign oil producers and domestic oil consumers (including energy-intensive industries) to the Federal Government and to the domestic oil industry (and other energy industries). The international competitiveness of U.S. energy-intensive industries would tend to worsen: higher domestic energy prices would increase production costs here, while the tax, leading to a decrease in U.S. oil imports, would increase the supply of oil elsewhere in the world, tending to drive down prices and, thereby, reducing production costs abroad of energy-intensive goods. Some proponents of an oil import tax argue that the changed resource allocation that would result would be more efficient. But an analysis of the economic issues suggests that the efficiency rationale is exaggerated.

An import tax also would affect the distribution of real income by income bracket, tending to offset some of the real income gains resulting from the current drop in petroleum prices. Because those gains are relatively more important for lower-income than for higher-income households, the effect would tend to be regressive.

An oil import tax would tend to mitigate the adverse effect of declining oil prices on smaller banks and other financial institutions with loan portfolios heavily weighted toward energy-producing industries in oil-producing States. This would be more than offset, however, by the harm to large banks with loans to other oil-producing countries (where oil prices would tend to be lowered further), and to U.S. banks that serve domestic and foreign energy consumers.

Within the United States, the major oil-producing States would tend to benefit from the oil price increases resulting from an oil import tax, directly and through the increases in oil production that would be spurred. Consumption of petroleum is not as concentrated geographically as is popularly believed, however, making it difficult to determine whether and how much more the incidence of an oil import tax would fall on some regions than on others.

U.S. trade would tend to be altered with an oil import tax. The smaller amount of oil imports combined with a lower price of oil received by foreign producers would mean fewer dollars spent for imports. The change in the international currency market would cause the dollar to appreciate, contracting exports to the United States and expanding non-oil U.S. imports. There would also be a tendency for the drop in U.S. oil imports to lower world oil prices and raise real incomes in other oil-importing nations (e.g., Japan and the Western European countries). Smaller Federal budget deficits and other factors could, however, reduce capital flows into the United States and, thereby, affect the exchange rate and the balance of payments.

The eventual result would be little change in the net balance of trade, a decrease in the overall size of U.S. trade, and a change in the composition of that trade.

The findings summarized here are similar to those reported in other studies. The differences in magnitude that do exist between studies result primarily from differences in assumptions about the extent to which an import tax would be passed through, and about the specifics of how and how quickly increases in oil prices work their way through the economy. 1/

1/ Another recent CRS study in this general area is: U.S. Library of Congress. Congressional Research Service. Alternative Energy Taxes: Industry, Regional, and National Impacts, by Larry Kumins, John Moore, and Robert Bamberger. Report No. 86-630 ENR. March 24, 1986. 49 p.

I. OIL IMPORT TAX PROPOSALS

A. Types of Oil Import Taxes

An oil import tax can be designed as either a unit tax or an ad-valorem tax. A unit tax would impose a constant dollar amount of tax per barrel of imported oil (say, a $15 or $10 per-barrel tax). An ad-valorem tax would impose the tax as a percentage of the price of oil per barrel (say, 10 percent of the import price per barrel).

A recent variation on the oil import tax idea is the variable import fee. The variable import tax is a unit excise tax equal to the difference between a market oil price and a target oil price. This option is designed for a market in which the market price of oil is declining. The amount of the tax or fee would vary inversely with the fluctuations in oil market prices. As the market price declines below a target price, the amount of tax per barrel increases. If the target price is set at $28 per barrel and oil prices decline to $25 per barrel, the variable fee would be $3 per barrel.

B. Pre-1982 Proposals

Excise taxes on imported petroleum date back to the Revenue Act of 1932, when a variety of taxes were introduced into the Internal Revenue Code to attempt to balance the Federal budget. 2/ The tax on crude oil was 21 cents per barrel; the tax on petroleum products was as high as $1.68 per barrel. 3/

2/ Mason's Internal Revenue Code, Annotated, Edited by William H. Mason, The Mason Publishing Co., St. Paul, MN, 1939. p. 1059.

3/ Ratner, Sidney. Taxation and Democracy in America. Octagon Books, New York, 1980. p. 448.

These taxes were terminated in 1962 and replaced by a system of minor customs duties, as part of the reorganization of the tariff schedules of the United States. 4/ In 1973, the minor customs duties were terminated and replaced by a system of license fees designed to reduce oil imports. This was the result of a 1969 task force appointed by President Nixon to address the problems with the Mandatory Oil Import Programs (MOIP). 5/ The fees started at 10 and one-half cents per barrel and by 1975 they had increased to 21 cents per barrel of crude oil and 63 cents per barrel of refined petroleum products.

In 1975, the Ford administration superimposed a supplemental fee of $1 per barrel of imported oil and reinstated the minor customs duties of 1962. 6/ The $1 supplemental fee was raised to $2 in June 1975 but repealed by the Carter Administration in January of 1976. The license fees and customs duties continued until April 1979, at which time the Carter Administration suspended them and instituted a system of oil import quotas.

The Carter Administration imposed by Executive Order a system of oil import fees in March 1980, with the objective of curtailing imports and enhancing national security. The fees were $ 4.62 for each barrel of imported crude oil and $4.20 for each barrel of imported gasoline. A successful court challenge by the Congress, however, terminated these fees shortly after they were an-

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4/ The duties were 5.24 cents per barrel for crude oil under 25° API and 10.5 cents per barrel for crude oil testing at or above 25° API.

5/ President Eisenhower's Mandatory Oil Import Program (MOIP) was a program of quotas, put into effect in 1959, on the importation of crude oil and petroleum products for the purpose of encouraging the development of domestic oil production and refinery capacity.

6/ In 1976, the Supreme Court upheld the President's authority to impose these fees, for national security reasons, under section 232(b) of the Trade Expansion Act. See U.S. Congress. Committee Print. Oil Imports: A Range of Options. A Study Prepared at the Request of the Subcommittee on Energy and Power, November 1969. 96th Congress, 1st session. U.S. Govt. Print. Off., Washington, 1979. p. 6.

nounced, and no revenues were ever collected. 7/ The customs duties were reintroduced in July 1980 at the old rates.

C. Post-1981 Proposals

The next phase of oil import tax proposals, the period from 1981 to the present, has been motivated largely by the goal of reducing Federal budget deficits. Since 1981, there has been a continuing interest in the oil import tax concept. By and large, the intensity of legislative activity in this area has been in direct proportion to budget deficit projections.

Recent declines in crude oil prices have further intensified legislative interest and activity concerning oil import tax proposals. More specifically, Congressional proposals to impose some kind of oil import tax picked up steam in 1982 as part of the realization that the Federal budget deficit was to be larger than expected. Several Congressional committees held hearings on the oil import tax and other energy tax options, as part of a package of proposed spending cuts and tax increases. 8/

At the same time, many in Congress are opposed to the oil import tax concept. In 1982, several resolutions against the idea were passed in the House and Senate. 9/ Ultimately, the Tax Equity and Fiscal Responsibility Act of 1982 increased some tax revenues without resorting to the energy taxes that had been proposed.

7/ U.S. Library of Congress. Congressional Research Service. Petroleum Import Adjustment Program--Background and Analysis. Typed Report. by Robert D. Poling. April 16, 1980. Washington, D.C.

8/ U.S. Congress. House. Committee on Government Operations. Oil Import Fee: Its Energy Implications and Consumer Impacts. Hearings, 97th Congress, 2d session, April 27, 1982. Washington, U.S. Govt. Print. Off., 1982.

9/ H. Res. 314, H. Res. 349, H. Res. 430, S. Res. 261, S. Res. 369, 98th Congress.

Early in 1983, there were some attempts by key Congressional leaders to revive the oil import tax concept, but these died for lack of general Congressional interest. Legislative interest and activity picked up again in 1985. Five bills were introduced in Congress to impose some type of oil import tax, but there was considerable opposition, including two proposed resolutions against the idea. 10/

The Reagan administration is basically opposed to the idea of an oil import tax, and this has influenced Congressional opinion and policy somewhat. President Reagan has specifically rejected the idea on numerous occasions. In 1985, President Reagan opposed efforts to include an oil import tax as part of the budget resolution for fiscal year 1986. The President did, however, include a version of the oil import tax as part of his State of the Union Address of 1983 as a contingency revenue source.

More recently, 1986 began with calls for tax increases to reduce Federal budget deficits and, thereby, perhaps reduce the impact on Federal programs of the Gramm-Rudman-Hollings law. 11/ In addition, the Congress is considering a tax reform bill that broadens the tax base and rdeuces rates, but does not decrease net revenues. Moreover, the sharp decrease in world oil prices and the consequent drop in U.S. oil exploration and development, oil company profits, and oil industry employment, has spurred requests by some oil producers and oil field service companies for a tax on petroleum imports -- which would help the industry by raising domestic oil prices.

10/ H. Res. 12, H. Res. 244, 99th Congress.

11/ The Balanced Budget and Emergency Deficit Control Act of 1985, P.L. 99-177.

II. REVENUE EFFECTS

The net gain in Federal revenues resulting from a tax on imported crude oil and petroleum products are estimated to equal --

- the direct yield from the oil import tax,
- plus additional oil windfall profit tax revenues from higher prices of domestically produced oil,
- plus additional corporate income tax receipts from domestic oil producers,
- less reductions in other revenue resulting from depressive effects on the level of income activity from higher general price levels and other economic consequences of higher petroleum prices.

To reflect the considerable uncertainty involving both the path of future prices and the response of foreign oil producers to an oil import tax, two "base" price scenarios and two assumptions regarding the extent to which a tax would be passed through to users have been used. See "Assumptions Used for Estimates" (starting on page 21) for more details. Calculations are based on the present tax code.

No estimates of revenue gain from a variable oil import tax were prepared for this report. But it can be noted that a variable tax would introduce an additional element of uncertainty. Such additional uncertainty raises doubts about the budgetary usefulness of a variable oil import tax.

A. Results

1. Net Revenues

Under every combination of tax amount, price scenario, and pass-through assumption used here, Federal Government revenues would be higher under the imposition of an oil import tax than without one. As shown in table 1, the esti-

Table 1. Estimated Net Federal Revenue Effects of Oil Import Taxes--Summary (billions of dollars)

Level of Import Tax and Incidence Assumption		1986	1987	1988	1989	1990
		New Price Scenario				
$10 per barrel	80% of import tax passed through	+26.8	+22.4	+20.8	+20.2	+19.1
		Price Scenario A				
$5 per Barrel	50% of import tax passed through	+12.1	+12.5	+13.6	+13.9	+14.2
	80% of import tax passed through	+13.6	+13.8	+14.8	+14.5	+14.5
$10 per Barrel	50% of import tax passed through	+22.2	+23.0	+24.9	+25.0	+25.6
	80% of import tax passed through	+24.6	+24.1	+25.8	+25.8	+25.9
		Price Scenario B				
$5 per Barrel	50% of import tax passed through	+12.1	+11.5	+11.6	+11.8	+12.2
	80% of import tax passed through	+13.6	+12.5	+12.3	+12.2	+12.2
$10 per Barrel	50% of import tax passed through	+22.2	+21.0	+21.4	+21.7	+22.2
	80% of import tax passed through	+24.6	+22.4	+22.1	+22.0	+22.0

Note: Crude oil prices per barrel without an oil import tax are assumed to be as follows:

	1986	1987	1988	1989	1990
New scenario -	$15	$15	$16	$17	$18
Scenario A -	$25	$20	$17	$16	$15
Scenario B -	$25	$24	$23	$22	$21

Sources: Tables 2, 3, and 4.

mated net gains range from $ 12.1 billion in 1986 to $ 14.5 billion in 1990 under a tax of $5 per barrel, and from $ 22.2 billion in 1986 to $ 25.9 billion in 1990 under a tax of $10 per barrel.

As shown in tables 2, 3, and 4, direct oil import tax receipts account for more revenue gains than any other source, representing from 45 percent to 78 percent of the combined positive revenue effects from the import tax, windfall profit tax, and oil producer income tax -- depending upon the combination of assumptions and the year. The estimated additional revenues from the windfall profit constitute the second largest component of revenue gain.

Estimated net gains in Federal revenues tend to fall over time in the new price scenario, largely because of decreases in import tax revenue. In scenarios A and B, the net gains change little or not at all over time. In both latter scenarios, windfall profit tax and corporate income tax receipts from domestic oil producers are estimated to decline slightly during the 1986-1990 period; and the estimated net decrease in other Federal revenues tends to grow over time, as the effects of higher oil prices (higher than would otherwise be the case) on the economy accumulate.

The negative revenue effects (labeled offsets in the tables) cause the estimated net revenue gain from an oil import tax to fall significantly below amounts frequently reported in communications media or cited by import tax supporters as resulting from such a tax. The larger the pass-through of an oil import tax into domestic petroleum prices, the greater this shortfall would be. In addition, it should be noted that the oil import tax would, by slowing down economic activity and by maintaining a higher inflation rate, tend to increase Federal Government expenditures. The net budgetary effect (as distinguished from the net revenue effect) is to reduce the deficit by less than is indicated by the net revenue figures alone.

Table 2. Estimated Federal Revenue Effects of Oil Import Taxes
New Price Scenario a/ (billions of dollars)

Level of Import Tax and Revenue Source	1986	1987	1988	1989	1990
	80% of Import Tax Passed Through to Buyers				
$10 per Barrel					
Import tax	+19.2	+19.3	+18.4	+17.5	+16.3
Windfall profit tax	+3.3	+2.7	+3.2	+3.5	+4.0
Corporate income tax b/	+8.0	+8.3	+8.1	+8.1	+8.0
Offsets c/	-3.7	-7.9	-8.9	-8.9	-9.2
Total	+26.8	+22.4	+20.8	+20.2	+19.1

a/ Assumed crude oil prices in the United States without an oil import tax: 1986 - $15 per barrel; 1987 - $15; 1988 - $16; 1989 - $17; 1990 - $18.

b/ Income tax payable by domestic oil producers. Includes the effect of the deductibility of the crude oil windfall profit tax.

c/ Personal income; corporate income tax payable by firms other than oil producers; and all other Federal revenue sources. The negative numbers indicate the decline in tax collections from other parts of the economy in response to oil price increases resulting from imposition of an oil import tax (please see pages 20 and 21 of the text).

Sources: Authors' estimates.

Table 3. Estimated Federal Revenue Effects of Oil Import Taxes
Price Scenario A a/ (billions of dollars)

Level of Import Tax and Revenue Source	1986	1987	1988	1989	1990
	50% of Import Tax Passed Through to Buyers				
$5 per barrel					
Import tax	+8.4	+10.5	+12.5	+13.3	+14.4
Windfall profit tax	+3.1	+2.9	+2.8	+2.8	+2.7
Corporate income tax b/	+1.7	+1.6	+1.5	+1.5	+1.4
Offsets c/	-1.1	-2.5	-3.2	-3.7	-4.3
Total	+12.1	+12.5	+13.6	+13.9	+14.2
$10 per barrel					
Import tax	+14.8	+18.8	+22.3	+23.7	+25.6
Windfall profit tax	+6.2	+6.0	+5.8	+5.6	+5.4
Corporate income tax b/	+3.4	+3.2	+3.1	+3.1	+3.1
Offsets c/	-2.2	-5.0	-6.3	-7.4	-8.5
Total	+22.2	+23.0	+24.9	+25.0	+25.6
	80% of Import Tax Passed Through to Buyers				
$5 per barrel					
Import tax	+7.8	+9.8	+11.7	+12.4	+13.3
Windfall profit tax	+5.0	+4.6	+4.5	+4.4	+4.4
Corporate income tax b/	+2.6	+2.6	+2.5	+2.4	+2.3
Offsets c/	-1.3	-3.8	-5.0	-5.8	-6.7
Total	+13.6	+13.8	+14.8	+14.5	+14.5
$10 per barrel					
Import tax	+12.6	+16.1	+19.2	+20.5	+22.1
Windfall profit tax	+10.1	+9.7	+9.4	+9.3	+9.1
Corporate income tax b/	+5.6	+5.3	+5.1	+5.0	+5.0
Offsets c/	-3.7	-7.0	-7.9	-9.0	-10.3
Total	+24.6	+24.1	+25.8	+25.8	+25.9

a/ Assumed crude oil prices in the United States without an oil import tax: 1986 - $25 per barrel; 1987 - $20; 1988 - $17; 1989 - $16; 1990 - $15.

b/ Income tax payable by domestic oil producers. Includes the effect of the deductibility of the crude oil windfall profit tax.

c/ Personal income tax; corporate income tax payable by firms other than oil producers; and all other Federal revenue sources. The negative numbers indicate the decline in tax collections from other parts of the economy in response to oil price increases resulting from imposition of an oil import tax (please see pages 20 and 21 of the text).

Source: Authors' estimates.

Table 4. Estimated Federal Revenue Effects of Oil Import Taxes
Price Scenario B a/ (billions of dollars)

Level of Import Tax and Revenue Source	1986	1987	1988	1989	1990
	50% of Import Tax Passed Through to Buyers				
$5 per Barrel					
Import tax	+8.4	+8.8	+9.4	+10.0	+10.8
Windfall profit tax	+3.1	+3.1	+3.0	+2.9	+2.9
Corporate income tax b/	+1.7	+1.6	+1.6	+1.6	+1.6
Offsets c/	-1.1	-2.0	-2.4	-2.7	-3.1
Total	+12.1	+11.5	+11.6	+11.8	+12.2
$10 per Barrel					
Import tax	+14.8	+15.6	+16.7	+17.8	+19.2
Windfall profit tax	+6.2	+6.1	+6.1	+6.0	+6.0
Corporate income tax b/	+3.4	+3.4	+3.3	+3.3	+3.2
Offsets c/	-2.2	-4.1	-4.7	-5.4	-6.2
Total	+22.2	+21.0	+21.4	+21.7	+22.2
	80% of Import Tax Passed Through to Buyers				
$5 per Barrel					
Import tax	+7.8	+8.2	+8.7	+9.3	+10.1
Windfall profit tax	+5.0	+4.9	+4.8	+4.7	+4.6
Corporate income tax b/	+2.6	+2.6	+2.6	+2.6	+2.6
Offsets c/	-1.8	-3.2	-3.8	-4.4	-5.1
Total	+13.6	+12.5	+12.3	+12.2	+12.2
$10 per Barrel					
Import tax	+12.6	+13.3	+14.2	+15.2	+16.5
Windfall profit tax	+10.1	+10.0	+9.9	+9.8	+9.7
Corporate income tax b/	+5.6	+5.6	+5.6	+5.6	+5.6
Offsets c/	-3.7	-6.5	-7.6	-8.6	-9.8
Total	+24.6	+22.4	+22.1	+22.0	+22.0

a/ Assumed crude oil prices in the United States without an oil import tax: 1986 - $25 per barrel; 1987 - $24; 1988 - $23; 1989 - $22; 1990 - $21.

b/ Income tax payable by domestic oil producers. Includes the effect of the deductibility of the crude oil windfall profit tax.

c/ Personal income tax; corporate income tax payable by firms other than oil producers; and all other Federal revenue sources. The negative numbers indicates the decline in tax collections from other parts of the economy in response to oil price increases resulting from imposition of an oil import tax (please see pages 20 and 21 of the text).

Source: Authors' estimates.

The above revenue estimates are based on a standard economic model of supply and demand for oil in an international market, described in the appendix to this section of the report. This framework is used to estimate the effects of an oil import tax on U.S. petroleum use, production, and imports. The results from these calculations are used to estimate the direct revenue yield from a given import tax and to generate estimates of the other revenue components (discussed next).

2. Oil Import Tax

Estimated direct annual revenues for an oil import tax range from $7.8 billion in 1986 to $14.4 billion in 1990 for a $5-per-barrel levy, and from $12.6 billion in 1986 to $25.6 billion in 1990 for a $10-per-barrel levy. The amounts vary according to price scenario and pass-through assumption, and tend to rise over time, as shown in tables 2, 3, and 4.

The importance of the price of oil is revealed in the pattern of estimates. For example, except for 1986, amounts of direct import tax receipts are much higher in scenario A than in scenario B, reflecting the higher level and faster rise in the quantity of imported oil associated with lower and more rapidly declining prices. Similarly, the revenue yield of a $10-per-barrel tax is appreciably less than twice the revenue yield of a $5 per barrel tax -- 22-38 percent less in scenarios A and B. Finally, the estimated revenue yield under the assumption of 50 percent pass-through is greater than that for 80 percent passthrough for every combination of price scenario, tax level, and year. As discussed in section III, higher petroleum prices decrease the quantity of imports by both reducing the total quantity of petroleum demanded and boosting the quantity of oil produced domestically.

3. Windfall Profit Tax

It is estimated that the additional annual revenues that would be collected from the windfall profit tax (WPT) on domestically produced crude oil, as a result of imposition of an oil import tax, would range from $3.1 billion to $10.1 billion. Because windfall profit tax revenues vary directly with price (but not in proportion), estimated gains in WPT receipts for each year are greatest under scenario B than under the other scenarios, greater under the $10 import tax than under the $5 tax, and greater under the 80 percent pass-through assumption than under the 50 percent pass-through assumption. Estimated gains in WPT revenues for the various price scenario and pass-through assumptions vary directly with the price level assumed and the estimated level of domestic oil production, and tend to be reduced over time by inflation, increases the "adjusted base prices" that help define the tax base designated as the "windfall profit." 12/

4. Corporate Income Tax Revenues from Domestic Oil Producers

Additional annual corporate income tax revenues from domestic oil (and gas) producers are estimated to range from $1.6 billion to $8.3 billion. Domestic oil producers are expected to derive higher net profits in proportion to the increase in domestic oil prices that would result from the imposition of an oil import tax 13/ In addition, domestic producers of natural gas liquids would de-

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12/ Details on the structure of and basis for the crude oil windfall profit tax can be found in U.S. Library of Congress. Congressional Research Service. The Crude Oil Windfall Profit Tax Act: Context and Content, by Bernard A. Gelb. Report No. 81-270 E, December 17, 1981. 29 p.

13/ The windfall profit tax is a deductible business expense for income tax purposes, and was so treated in the development of the estimates of additional tax receipts.

rive higher profits from the increase in prices of natural gas liquids that would result from an oil import tax. 14/

This category of revenue gains, as with the additional WPT receipts, vary directly with price (but not proportionately); similarly, they tend to decrease over time, but very slowly.

5. Revenue Offsets

As will be discussed in the section concerning the effects of an oil import tax on the economy as a whole, the imposition of an oil import tax would be expected to result in a lower level of economic activity than would be the case without such a tax. This, in turn, would decrease personal and business incomes, and therefore income tax liability. So, too, would the decrease in economic activity reduce the aggregate level of transactions on which many other Federal revenues are based.

These reductions in revenue levels would tend to offset somewhat the revenue gains from the import tax, the windfall profit tax, and oil and gas producers' income taxes. The estimates of the revenue offsets which appear in tables 2, 3, and 4 are based on studies of the macroeconomic effects of oil price shocks, 15/ and on estimates of the statistical relationship between Federal tax revenues and changes in economic activity.

14/ Because natural gas liquids have, on average, only about 70 percent of the energy content of crude oil (barrel for barrel), the aggregate gain in natural gas liquids prices was estimated to be 70 percent of that for crude oil on a volume basis. Prices of natural gas liquids reflect the 30-percent lower energy content of those products.

15/ For a survey of the results of several such studies, see Energy Information Administration. Impacts of World Oil Market Shocks on the U.S. Economy, July 1983. 49 p.

The estimated annual reductions in Federal revenues from lower economic activity range from $1.1 billion in 1986 to $6.7 billion in 1990 for a $5-perbarrel tax, and from $3.7 billion in 1986 to $10.3 billion in 1990 for an import tax of $10 per barrel. These amounts tend to increase considerably over time for all scenarios: the relative effect of an import tax on the general price level (and, therefore, on economic activity) grows as the base prices in the price scenarios fall. As would be expected, these negative effects are greater with a higher import tax and with a larger pass-through assumption.

It should be noted again that these estimated offsets and the estimated gains described above refer to Federal revenues, and do not describe the net budgetary effect.

B. Assumptions Used for Estimates

Estimates of the effects of an oil import tax on petroleum prices and imports and of the revenue yield to the Federal Government depend considerably upon the assumptions made concerning the incidence of the tax and concerning certain basic variables such as petroleum prices, use, and imports in the absence of a tax.

1. Generally Competitive Markets

With domestic petroleum price controls removed five years ago, the market power of OPEC declining, crude oil production by Mexico and the United Kingdom near peak levels, and world use of petroleum significantly below its peak, the world and U.S. petroleum markets are sufficiently competitive for analysis based on the market mechanism to be appropriate. 16/

2. Prices

With an apparent surplus of crude oil in the world in relation to demand at prevailing prices, the market is working to reach a new lower equilibrium price. Absence of market equilibrium at the present time makes statements of likely behavior by buyers and sellers more risky than usual.

Considering the uncertainty of projecting future oil prices, three price path trajectories have been used. Initially, two price scenarios — designated "low" and "high" -- were developed; these were based on then-current and anticipated price levels. The ensuing oil price collapse necessitated adoption of a "new" scenario, with lower prices than the original "low:" $15 per barrel in 1986 and 1987, $16 in 1988, $17 in 1989, and $18 in 1990. Scenario A — the original low price scenario -- has a sharp drop in price from $25 per barrel in 1986 to $20 in 1987, and $17 in 1988, and then a gradual decline to $15 in 1990. Scenario B has a gradual decline from $25 in 1986 to $21 in 1990.

It is assumed that OPEC or any other oil producing entity will be unable to exert enough market power to reduce output and raise prices. However, although it appears unlikely at this time, there is a chance that the threat of sharply declining oil revenues will force the producing countries into an output and market share agreement to raise prices.

16/ The authors have used a competitive framework aware that analysts disagree concerning the most apprpriate characterization of world oil trade. In one study, Griffin found that the market-sharing cartel model best explains production levels of OPEC producers during the 1971-1983 period, and that the competitive model best explains for non-OPEC producers. See James M. Griffin. OPEC Behavior: A Test of Alternative Hypotheses. The American Economic Review. December 1985. Vol. 75, No. 5. p. 965-963.

3. Price Elasticities

The relative reactions of producers and users of petroleum to price changes in the market would determine the incidence of an oil import tax. Price elasticity is a measure of the responsiveness of buyers and sellers to changes in price. It is the ratio of the change in quantity demanded (or supplied) to the "original" quanitity divided by the ratio of the change in price to the "original" price. 17/ The more elastic is the supply of oil compared with the elasticity of the demand for oil, the larger will be the ultimate rise in the selling price as a result of a tax boost and the greater the pass-through of the tax to buyers. The respective elasticities will each be larger in the long run (when there is sufficient time to fully change behavior and/or equipment, or to re-allocate factors of production), than in the short run (when only minor adjustments can be made).

Reasonable assumptions of the domestic demand price elasticity and the domestic supply price elasticity are important, because the two, along with the levels of domestic demand and supply, determine the price elasticity of U.S. demand for oil imports. (See the discussion and equations in the Appendix.)

Demand price elasticities for refined petroleum products have been widely estimated; results have varied, depending upon the particular product and/or user group, the data base, estimation method, and other technical aspects. The results average roughly -0.2 for the short run and -0.8 for the long run in the United States. For the purpose of estimation, -0.2 has been assumed to be the domestic oil demand price elasticity for the first full year of imposition of a tax, increasing 0.05 (in absolute terms) in each succeeding year.

17/ Thus, for example, if the quantity of oil demanded decreases by 10% when the price rises by 40%, the demand price elasticity would be -0.25.

It is much more uncertain how sellers will respond. Estimates of domestic or world oil supply price elasticity are much harder to develop than those for demand price elasticity -- a fact reflected in a wide range of results. It is likely that the price elasticity of foreign supply is much greater than that of domestic supply, given that oil production capacity utilization rates are much lower on average abroad than domestically, and that U.S. producers are subject to the crude oil windfall profit tax (WPT). [18]

It is assumed that the price elasticity of domestic supply equals +0.2 in 1986, increasing by 0.05 per year. The price elasticity of U.S. oil import demand therefore is -1.024 for 1986, increasing each year more than proportionally to the sum of the domestic supply and demand price elasticities. (The amount -1.024 is derived from the equations in the Appendix.)

Because it is particularly uncertain how foreign oil producers would respond to an oil import tax, two sets of foreign supply (for export to the United States) elasticities have been used: (a) The foreign export supply price elasticity equals, in absolute terms, the U.S. oil import demand price elasticity in each year; and (b) the foreign export supply price elasticity equals four times the U.S. oil import demand elasticity in each year.

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[18] Our assumption of domestic supply price elasticity incorporates the analytical point that the WPT tends to raise the selling price required by domestic producers to supply a given volume of oil by an increasing dollar amount for increases in production; thus the domestic supply price elasticity is even less than it otherwise would be. An extensive analysis of the effect of the crude oil windfall profit tax on oil supply can be found in: An Analysis of the Crude Oil Windfall Profit Tax. Energy Information Administration, April 1983.

4. Quantities

To provide a base case for which changes in quantities can be estimated, quantities of domestically produced oil, imports, and total petroleum use in the United States in 1986, in the absence of a tax, have been obtained from Data Resources, Inc. (DRI). [19] Quantities for 1987 through 1990 are derived, for each combination of price scenario and demand and supply price elasticities, from the quantities of the respective previous years.

5. Other Economic Variables

For simplicity, all other economic forces implicit in or underlying the specific quantitative assumptions adopted for baseline conditions (no oil import tax) are assumed to be in effect under the imposition of such a tax.

6. Internal Consistency

Price and quantity changes resulting from the tax are assumed to be determined simultaneously. This means that the estimates of the interaction of the tax, oil prices, and the quantities of petroleum demanded and supplied are consistent with each other. (The general form of these equations is described in the Appendix.)

7. An Aggregated Market

Because petroleum products (except residual oil) sell at higher prices than crude oil, the same absolute import tax would be a smaller proportion of the selling prices of products than of crude oil. To simplify the analysis, it is assumed herein that there is one combined market for crude oil and petroleum products (and the same tax on crude and on products). This does not significantly affect estimates of quantity and revenue effects relative to the effects of other uncertainties.

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[19] Data Resources, Inc. Energy Review. Vol. 9, Winter 1985-1986, p. 163.

C. Caveats

The analytical framework used to generate the revenue estimates is generally a useful and realistic characterization of the U.S. and world oil markets. The following market features, however, tend to complicate the analysis, which could affect the revenue estimates.

- Since the demand for petroleum is a derived demand resulting from the goods and services it helps produce, the degrees of buyer and seller responses to a change in the price of oil are affected by the natures of the demand for and supply of the final goods and services.
- Costs and prices of goods other than oil and of services will be directly and/or indirectly affected by the change in petroleum prices; and buyers and sellers of these other goods will react in much the same manner (not necessarily the same degree) as oil buyers and sellers.
- In order to retain supply arrangements or because of existing contracts, some purchases of petroleum are at higher than "market" prices; thus not all current sales are made at prices that reflect the latest supply and demand relationships.
- The highly integrated nature of the oil industry, together with different tax treatment of the different phases of production, provide some scope, and, sometimes, incentive for, the large integrated firms to shift

revenues (by adjusting prices) from one phase of their operation to another. Therefore, prices at the wellhead, for example, may be lower or higher than they would be otherwise. For example, some observers have pointed out a gap between domestic crude oil prices and the cost of landed foreign crude oil, and have hypothesized that it results from purposeful holding down of crude oil wellhead prices by integrated companies in order to minimize payment of the crude oil windfall profit tax. Revenues "lost" from the lower prices, according to such observers, are recouped by the integrated companies elsewhere in their operations. An oil import tax might provide a situation for the alleged practice to occur.

- To reflect processing costs, all major petroleum products except residual oil are sold at higher prices than the crude oil from which they are refined. Thus, a dollar-for-dollar passthrough to ultimate users of an increase in refineries' cost of crude oil represents a smaller percentage change in the product price than in the price of crude.

- Refiners as a group, particularly integrated ones, have the potential of narrowing margins, and thus absorbing part or all of any crude oil price increase resulting from an oil import tax. To the extent that refiners reduce their profits in response to a tax, the incidence of the tax on consumers will be smaller, other things being equal.

The authors recognize the potential of these characteristics of the petroleum market to prevent "normal" working of the market mechanism, but the inherent difficulties and the scope of this study preclude estimation and inclusion of any quantitative effects of these "imperfections."

APPENDIX

1. The Analytical Framework

The revenue effects of an oil import tax have been estimated from a standard static economic framework in partial equilibrium of international trade in oil. Assumed attributes of the U.S. and world oil markets have been incorporated into the framework, shown graphically in figure 1. Because it is assumed that U.S. producers have a comparative disadvantage in oil production, the United States must be a net importer of petroleum. Without oil imports, equilibrium in the U.S. market for crude oil and petroleum products would be achieved at Q_2, P_2 in diagram (a) of figure 1. The difference between the U.S. oil demand schedule D and U.S. oil supply schedule S at prices below P_2 defines the demand schedule for imported petroleum, shown in diagram (b). 20/

In the remainder of the world oil market, shown in diagram (c), foreign producers would establish an equilibrium at P_1, Q_1, without U.S. trade. But producers in those countries discover that they can receive a much higher price for their oil by exporting it to the United States. Concomitantly, U.S. consumers can buy the oil from abroad at a much lower price than they can at home without trade. Trade takes place because the economic incentives for trade are present. The difference between S and D in diagram (c) defines the supply schedule for exports to the United States, in diagram (b).

In this free trade "model," the magnitude of oil trade and the price at which oil will be traded are determined by the intersection of the U.S. demand curve for imported oil and foreign producers' export supply curve. The import demand schedule indicates the quantity of oil U.S. consumers are willing to buy from abroad at various prices. It is the difference between the quantity demanded by U.S. consumers and the quantity supplied by U.S. producers at all price levels below P_2. Since $Q^s = Q^d$ at P_2, U.S. imports equal zero at that price. The export supply schedule shows the quantity of oil supplied to the U.S. at various prices by the exporting countries. It represents the difference between Q^d and Q^s of oil in the exporting countries, at prices above P_2.

Given the demand and supply schedules in diagram (b), Q_3 amount of oil will be imported into the United States at price P . When the market clears, the equilibrium price in the United States will be lower than before trade, the quantity demanded will be greater, and the quantity supplied domestically smaller. The opposite takes place in the exporting countries. But oil consumers in both areas pay the same price (P_3) net of transportation costs.

The effects of a hypothetical unit excise tax on oil imports have several components, depicted in figure 2. The immediate effect is an upward shift of the export supply curve, in diagram (b), by the amount of the tax. 21/ At

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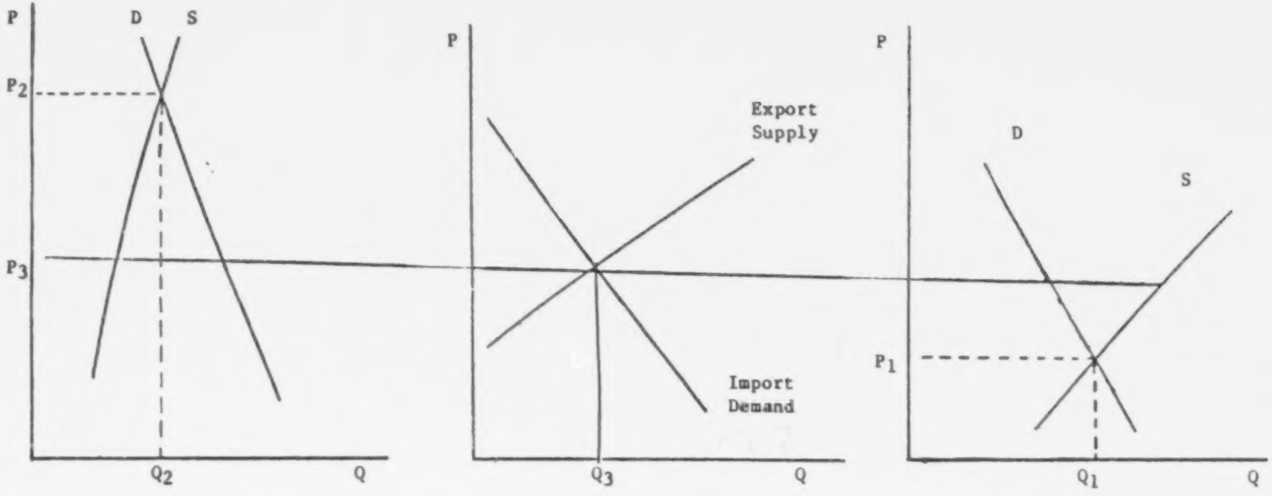
20/ A supply (or demand) schedule shows the amount of a product that would be offered for sale (or would be purchased) at different prices.

21/ Alternatively, the amount of a per-barrel tax can be visualized as a downward shift in the import demand schedule. Either approach gives the same results in the case of a unit excise tax.

Figure 1. International Oil Trade Framework

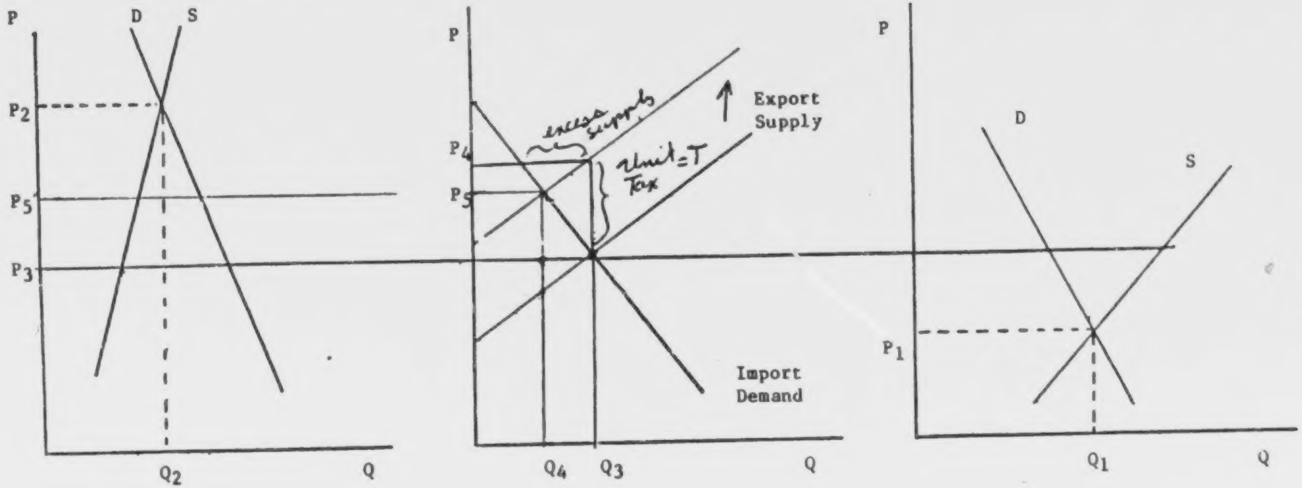

P
D
S
P_2
P_3
Q_2
Q
P
Export Supply
Import Demand
Q_3
Q
P
D
S
P_1
Q_1
Q

(a) United States

(b) Foreign Trade

(c) Exporting Countries

Figure 2. Illustrative Effect of an Oil Import Tax on Oil Trade



(a)

United States

(b)

Foreign Trade

(c)

Exporting Countries

quantity Q_3 (and all other quantities of the supply schedule), the asking price will be higher than before by the exact amount of the tax. At P_4 (the asking price corresponding to Q_3), however, less oil is demanded than is offered. The net result of this market disequilibrium is that the import price of oil rises from P_3 to P_5, rather than to P_4, representing an increase of less than the full amount of the tax. Quantity imported becomes Q_4. The amount of tax revenues collected would be the amount of the tax times the new level of imports, Q_4.

The extent to which the tax is shifted forward as a price increase depends on the price elasticity of the import demand vis-a-vis the export supply schedule. The more price-elastic is the supply schedule relative to the demand schedule, the greater is the extent of forward shifting. The extent of tax shifting determines the degree of the incidence of the tax on the U.S. economy.

2. Equations

Legend:

P = price
Q^D = quantity demanded
Q^S = quantity supplied
US = United States
I = imports by the United States
E = exports to the United States
a, c, e = constant terms
b, d, f = coefficients

U.S. Oil Market:

Demand: $Q^D = a - bP$

Supply: $Q^S = c + dP$

Derived Import Demand:

$$Q^D_I = Q^D_{US} - Q^S_{US}$$

$$Q^D_I = a - bP - (c + dP)$$

$$Q^D_I = (a - c) - (b + d)\,P \qquad (1)$$

Price Elasticity of Domestic Demand (e^D_{US}):

$$e^D_{US} = \frac{P}{Q^D_{US}}\left(\frac{\partial Q^D_{US}}{\partial P}\right) = -b\left(\frac{\partial P}{\partial Q^D_{US}}\right)$$

Price Elasticity of Domestic Supply (e^S_{US}):

$$e^S_{US} = \frac{P}{Q^S_{US}} \left(\frac{\partial Q^S_{US}}{\partial P} \right) = d \left(\frac{\partial P}{\partial Q^S_{US}} \right)$$

Price Elasticity of Import Demand Schedule (e^D_I):

$$e^D_I = \frac{P}{Q} \left(\frac{\partial Q_I}{\partial P} \right) = -(b + d) \frac{P}{Q^I} \quad = -(b + d) \frac{P}{Q^D_{US} - Q^S_{US}}$$

$$= \frac{-bP}{Q^D_{US} - Q^S_{US}} - \frac{dp}{Q^D_{US} - Q^S_{US}} = \frac{e^D_{US}}{1 - \frac{Q^S_{US}}{Q^D_{US}}} - \frac{e^S_{US}}{\frac{Q^D_{US}}{Q^S_{US}}}$$

Export Supply Schedule:

$$(2) \qquad Q^S_E = e + fP$$

3. Analysis

To determine the quantity and direct revenue effects of an oil import tax, first take the inverse of equations (1) and (2):

$$(1)' \qquad P = \frac{a - c}{b + d} - \frac{1}{b + d} Q^D_{US}$$

$$(2)' \qquad P = -e/f + 1/f \; Q^S_{US}$$

The initial effect of a tax at \$T per barrel is to raise all export supply prices, defined by (2)', by T. This is tantamount to a shift of the export supply schedule up and to the left. Thus, (2)' becomes:

$$(2)'' \qquad P = e/f + 1/f + T$$

The new equilibrium prices and quantities are found by solving (1)' and (2)'' simultaneously. This model gives estimates of the direct revenues from imposition of an oil import tax, shown in tables 2 and 3. Direct Government revenues equal T times the new equilibrium level of imports.

III. ENERGY MARKET EFFECTS

A. Petroleum Prices, Consumption, and Imports

Consideration of the effects of an oil import tax on petroleum markets in particular and energy markets in general is complicated by the fact that the world oil market, characterized by excess supply, is in disequilibrium, with prices tending to decrease. This tendency for prices to decrease, which leads some to conclude that most or all of an oil import tax would be borne by foreign oil producers, should not be confused with the elasticity of foreign oil supply. That elasticity is relatively high (resulting from low capacity utilization), which implies that foreign oil producers would be able to shift most of the tax forward.

Another complicating factor is that the response of buyers and sellers to an oil import tax will depend upon the degree to which such a tax is permanent. Past experience, in which most taxes once imposed remain, would tend to make buyers and sellers perceive an oil import tax as permanent. But frequent Congressional changes regarding the general investment tax credit and the recent expiration of several energy tax credits could plant some seeds of doubt concerning permanence.

1. Crude Oil Prices

Under the pass-through assumptions selected, it necessarily follows that an oil import tax of $5 per barrel would result in domestic crude oil prices $2.50 or $4 per barrel higher than in the base cases. And a $10 per barrel tax would result in domestic crude oil prices $5 or $8 per barrel higher than in the base cases.

Of course, while the absolute amounts of these price increments, by assumption, would be the same for every year for each tax level and pass-through assumption, the relative size would increase—given declines in the base price scenarios. That increase would be especially steep in the new price scenario. As seen in table 5, the relative impact on crude oil prices of a $5-per-barrel tax with 50 percent pass-through would rise from 10 percent in 1986 to 12 percent in 1990 in the high price scenario. Under the assumption of 80 percent pass-through, a per-barrel tax of $10 would result in average domestic crude oil prices of $23 rather than $15 per barrel--53 percent higher--in new low price scenario.

2. Product Prices

If refiners and marketers would be able to pass through to end users of petroleum all of any effects on crude oil prices of an oil import tax, prices of refined petroleum products would be higher, on average, by about 6 cents per gallon to about 19 cents per gallon. The amounts of increase applied to

Table 5. Effects of an Oil Import Tax on U.S. Crude Oil Prices, Crude Oil Production, and Petroleum Use

		1986	1990
	Average Crude Oil Prices (dollars per barrel)		
Base Price Scenarios:	New	15.00	18.00
	A	25.00	15.00
	B	25.00	21.00
Assumed Effects	$5 tax, 50% pass-through	+2.50	+2.50
	80% pass-through	+4.00	+4.00
	$10 tax, 50% pass-through	+5.00	+5.00
	80% pass-through	+8.00	+8.00
	Petroleum Use (millions of barrels per day)		
Estimated Effects			
New scenario	$10 tax, 80% pass-through	-1.04	-1.89
Scenario A	$5 tax, 50% pass-through	-0.31	-0.50
	80% pass-through	-0.50	-0.85
	$10 tax, 50% pass-through	-0.63	-1.07
	80% pass-through	-1.00	-1.66
Scenario B	$5 tax, 50% pass-through	-0.31	-0.39
	80% pass-through	-0.50	-0.65
	$10 tax, 50% pass-through	-0.63	-0.79
	80% pass-through	-1.00	-1.25
	Domestic Production (millions of barrels per day)		
Estimated Effects			
New scenario	$10 tax, 80% pass-through	+0.71	+1.28
Scenario A	$5 tax, 50% pass-through	+0.18	+0.33
	80% pass-through	+0.28	+0.44
	$10 tax, 50% pass-through	+0.40	+0.59
	80% pass-through	+0.56	+0.88
Scenario B	$5 tax, 50% pass-through	+0.18	+0.23
	80% pass-through	+0.28	+0.34
	$10 tax, 50% pass-through	+0.40	+0.43
	80% pass-through	+0.56	+0.68

Source: Authors' estimates.

prices paid by end users in April 1986 would represent, other things being equal, price rises of from about 7 percent to 21 percent for motor gasoline and heating oil (excluding local taxes), 10 to 30 percent for jet fuel, and 20 to 60 percent for residual oil. These relative price effects would decrease over time under the new scenario (as market prices rise) and increase over time under scenarios A and B (as market prices fall).

There could, and probably would, be significant differences in price effects among types of product, geographic regions, and seasons of the year. This is because product prices are affected by differences and variations in competitive conditions, inventory levels, and costs of distribution, among other factors.

The extent to which the crude oil price increases resulting from an oil import tax would be reflected in product prices is as uncertain as the extent of pass-through of such a tax to crude oil buyers. It is assumed here that the characteristics of demand for and supply of refined products are such that whatever pass-through of any change in crude oil prices occurs is consistent with the specific assumptions concerning buyer and seller behavior.

3. Petroleum Use

It is estimated that the imposition of an oil import tax would cause U.S. use of petroleum in 1986 to be 0.31-1.04 million barrels per day lower than without an oil import tax, and 0.39-1.89 million barrels per day lower in 1990, depending upon the amount of the tax, price scenario, and pass-through assumption.

The effects of an oil import tax on petroleum use (reductions) increase over time in every combination of price and pass-through assumption, because the relative impacts on refined product prices increase as underlying prices fall and/or as the assumed demand price elasticity increases. (See the discussion of effects of an import tax on crude oil and product prices, above.)

Thus, the effects on use are greater over time in the lower price scenarios than in the higher price scenario. Of course, other things equal, larger amounts of tax pass-through result in larger effects on use.

4. Production

It is estimated that imposition of an oil import tax would lead to an increase in U.S. production of crude oil of from 0.18 million to 0.56 million barrels per day in 1986, depending upon the amount of tax, price scenario, and pass-through assumption (see table 5). The positive effects on oil production increase between 1986 and 1990 in every case, because the relative impacts of the effects of an import tax on crude oil prices increase as assumed underlying prices fall and/or as the assumed supply price elasticity increases. Similarly, the effects on production are greater over time in the low price scenarios than in the higher price scenario.

The relative impact on production is likely to be greater for "stripper" wells (wells producing 10 barrels per day or less) than for others. Since stripper wells tend to have relatively higher production costs per barrel, they tend to be marginal and, therefore, the first to be shut down in periods of price decline. Also, once shut down and "plugged," the high cost (per barrel of anticipated production) of reopening makes it unlikely that production would resume. The impact on stripper well production may be less than once anticipated by some, however. Recent rulings by the U.S. Department of the Interior and by agencies of the States of Texas and Oklahoma have suspended or eased requirements that inactive wells be plugged within a certain time limit. 22/

22/ The Oil and Gas Journal. March 24, 1986. p. 1; The Wall Street Journal. April 18, 1986. p. 10.

5. Imports

The impact of an oil import tax would have a greater relative effect on imports of petroleum than on prices, use, or domestic production. As the marginal source of petroleum in the United States, the amount of imports would be cut into by both the decrease in use and the increase in production that would result from the higher prices caused by an import tax. It is estimated that imports would be 0.54 million to 1.75 million barrels per day lower in 1986, and 0.66 million to 3.17 million barrels per day lower in 1990 (see table 6).

Table 6. Estimated Effect of an Oil Import Tax on U.S. Imports of Petroleum (millions of barrels per day)

	1986	1990
New Scenario	-1.75	-3.17
Scenario A		
$5 tax, 50% passthrough	-0.54	-0.91
80% passthrough	-0.80	-1.39
$10 tax, 50% passthrough	-1.14	-1.79
80% passthrough	-1.69	-2.73
Scenario B		
$5 tax, 50% passthrough	-0.54	-0.66
80% passthrough	-0.80	-1.00
$10 tax, 50% passthrough	-1.14	-1.37
80% passthrough	-1.69	-2.06

Source: Authors' estimates.

B. The Oil Industry

1. Attraction of Resources

Higher petroleum prices resulting from an oil import tax would increase the incentive for exploration, development, and production of crude domestically, leading to a greater allocation of resources to the oil producing sector.

The effect of prices—actual and anticipated—on investment and employment in the oil industry can be seen in the swings in activity in the industry since the Arab oil embargo of 1973-1974. Between 1973 and 1981, when the average wellhead price of crude oil rose from $3.89 to $31.77 per barrel, the average number of seismic (exploration) crews "in the field" almost tripled, and the average number of rotary rigs in operation more than tripled; total employment in oil and gas extraction increased 153 percent. Between 1981 and 1985, while crude oil wellhead prices fell about 25 percent, seismic crews, active rotary rigs, and employment decreased 43 percent, 50 percent, and 10 percent, respectively. A $10 per barrel import tax that is substantially passed through could well have effects of these magnitudes (in relation to the base price scenarios).

2. Oil and Gas Field Services

Imposition of an oil import tax would have a greater relative effect on the fortunes of field service firms than on oil producers. Field activities such as exploration services and contract drilling greatly depend upon producers' anticipation of profits from future production—such anticipation stemming from the level of current and expected future prices. This contrasts with oil producers, who can at least temporarily obtain revenues from currently producing fields. This greater volatility of field service activity is shown in the relative changes in employment between 1978 and 1981, when the number of employees in oil and gas producing "establishments" rose about 85 percent, and the number employed in field services rose about 220 percent.

3. Refining

It is difficult to generalize about how the imposition of an oil import tax would affect that part of the U.S. oil industry involved in petroleum refining, but the overall effect probably would be positive. Three-fourths of the crude oil processed by U.S. refineries is domestically produced. Both the level and proportion would be expected to increase with the higher levels of domestic crude production and of natural gas liquids, and lower level of imports induced by the price effects of an oil import tax. Some refiners (independents, to a considerable extent) traditionally have tended to rely proportionately more on imported than on domestically-produced oil--often as a result of location. Some of these may be squeezed out by the decrease in imports we have estimated would result from an oil import tax.

Higher prices of petroleum in the United States than elsewhere, however, would tend to raise the production costs of U.S.-produced petrochemicals (and other hydrocarbon-derived products) and of U.S. goods and services into which those products are inputs relative to the production costs of their foreign produced counterparts. The consequent negative effect on demand for those U.S. end products would ultimately be felt in the form of lower demand for refinery output. This problem could be solved partially by allowing payments of an oil import tax to be rebated on products exported--in the manner that value added taxes are rebated in other countries.

4. Marketing

The marketing operations of the U.S. oil industry would be significantly, but not devastatingly, affected by the imposition of a large oil import tax that is substantially passed through in the form of higher product prices. A modest tax that is not substantially passed through would have very little effect. 23/

At the high end of our sets of estimates, under the new price scenario and the imposition of a $10 per barrel tax that is 80 percent passed through, total U.S. use of petroleum products is estimated to be 9 percent lower in 1990 than otherwise. If the difference in quantity used is distributed proportionately among the types of products, it would imply about 10 billion fewer gallons of motor gasoline purchased in 1990 than without the tax. The lower volumes per service station probably would tend to result in more closings of stations, or fewer opening of new stations, as some previously marginal locations would become unprofitable. Since the mid-Seventies, the number of gasoline stations in the United States has decreased markedly.

The effects on the marketing of other product types would be roughly similar, but buyer-seller relationships are different.

At the low end, under scenario B and the imposition of a $5 tax, total U.S. use of petroleum products would be only 2-3 percent lower in 1990 than otherwise. Again assuming proportionality, about 2-3 billion fewer gallons of gasoline would be purchased—a very small "shortfall."

23/ Readers are reminded that the comparison is with the level of activity that would occur in the absence of an import tax under the conditions of declining prices specified by either price scenario.

5. Industry Consolidation

Compared with events under the assumed price trends and levels in the absence of an oil import tax, higher prices resulting from an oil import tax probably would tend to reduce the extent of further "shakeout" in the oil industry and the degree of any consequent concentration. During the last several years, as oil prices have dropped, the decrease in demand for field services (described above) has resulted in a number of acquisitions, bankruptcies, and other withdrawals from the business. Higher prices probably would increase demand for these services, improve financial health, and at least slow the attrition.

Among producers there has been a tendency toward mergers and acquisitions of entire firms, or parts thereof. Reportedly, many such mergers and acquisitions are motivated by the desire to acquire additional oil and/or gas reserves, and spurred by a perceived gap between the implied stock market valuation of the reserves of the "target" company and the estimated cost of acquiring equivalent reserves through exploration and development. Higher prices would tend to raise stock market valuation of reserves, but unless a large increase in demand for field services resulted, there would be little effect on the costs of exploration and development.

C. Other Energy Markets

1. General Effects

In addition to boosting oil prices (actually raising the path of decline), an oil import tax would tend to raise the prices of other energy sources. The higher prices of one energy source would lead to an increase in demand for substitutes and near substitutes for that fuel (natural gas, coal, etc.), and an increase in the prices of those substitutes and near substitutes. Other things equal, other fuels would tend to increase their shares of energy markets relative to the shares they would have in the absence of an import tax.

The experience since the oil shocks of the 1970s provides some indication of the effects of prices of other energy sources, although oil import taxes of the levels proposed legislatively and hypothesized in this report probably would lead to much smaller relative changes in oil prices in the 1980s than those that occurred in the 1970s. Between the Fall of 1973 and the Spring of 1981, the average U.S. wellhead price of crude oil increased by about 900 percent. Mine prices of bituminous coal and lignite more than tripled between 1973 and 1985; wellhead prices of natural gas jumped to about 13 times their 1973 level, and average prices of electricity sold by utilities to end users more than tripled. 24/ When wastes and wood are included, non-petroleum energy sources increased from about 53 percent to about 60 percent of total U.S. energy consumption between 1973 and 1985.

2. Natural Gas and Coal

Given a certain import tax level and degree of pass-through, the strength of the effect of higher oil prices on other energy sources would vary by fuel and end-use market. Natural gas and coal compete most closely with petroleum in commercial and industrial "processes" such as boiler heating, where the type of fuel is not crucial and many users have, or can inexpensively obtain, the

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24/ The increase in gas prices partly reflects the transition from a fully regulated market to a nearly fully deregulated market, as well as the effect of oil price increases.

capability of easily switching fuels. Since oil and gas are the fuels most often "paired" at industrial and commercial plants that have "dual-firing" capability, natural gas prices have been particularly affected by the decline in oil prices. An oil import tax probably would lead to increased use of natural gas and, as demand for gas rose, to higher gas prices than would otherwise be the case.

Competition between petroleum and natural gas for home heating is intense, but not as immediate as in industrial and commercial situations, since few houses have multi-fuel capability. In a declining petroleum price situation (relative to gas), higher oil prices resulting from an import tax would, of course, tend to reduce or entirely offset any improvement in the price of oil relative to that of gas; and any tendency for oil to recapture part of the home heating market would be mitigated.

In electricity generation by utilities, higher oil prices resulting from an import tax probably would cause a further cut in petroleum's small and shrinking share of energy inputs. The five States that now account for more than three-fourths of utility oil use have been reducing oil use by roughly 10 percent per year since 1980, with coal and nuclear power taking over.

On the production side, because about one-third of natural gas is produced in association with crude oil, higher levels of crude output as a result of an import tax would help boost output of natural gas and natural gas liquids.

3. Electricity

On a national basis, an oil import tax is likely to affect electricity use more in industrial applications (taken together) than in commercial or residential situations. While industrial firms are unlikely to change a particular fuel-specific production technology when that fuel increases only moderately in price, the industrial sector as a whole is more responsive to price change than other sectors of the economy.

In the residential sector, electricity is less of a direct competitor of oil in home heating than first appearances may suggest. About 19 percent of occupied housing units are heated (primarily) with electricity, and about 15 percent by petroleum (including kerosene). But regions in which electricity is common tend not to have much competition from oil, and vice versa.

4. Alternative Energy Sources

By tending to raise oil prices, imposition of an oil import tax would, in principle, tend to encourage greater development of and commercialization of synthetic fuels, solar and geothermal energy, and other "alternative" energy sources. There is a considerable possibility, however, that petroleum prices have, or will have, dropped so far below the prospective cost of nearly all, if not all, alternative energy use technologies that it would take a massive import tax for developers of those technologies to hope to become commercially viable. For example, the participants in the Great Plains coal gasification project, which already had substantial price subsidies, withdrew in the summer of 1985, when domestic crude oil prices per barrel were about $24, or roughly $8-$10 higher than at this writing. Alcohol fuels are competitive now essentially only with special tax exemptions. It is believed by some that gasohol would have great difficulty remaining commercial without (or with greatly reduced) Federal and/or State tax exemptions, and with crude oil prices at Spring 1986 levels. 25/

25/ See, for example, "Ethanol's Future Threatened by Tax Reform, Cheap Oil," The Energy Daily. March 20, 1986. p. 3.

IV. GENERAL ECONOMIC EFFECTS

An oil import tax is likely to produce a variety of economic effects, the degree of which would depend upon the amount of tax per barrel and the extent to which the tax would be passed through to users. This section of the report discusses the probable effects on aggregate economic activity, resource allocation, income distribution, and regional tax burdens. It also discusses some of the implications for the international competitiveness of U.S. industries, for U.S. financial institutions, and for U.S. trade.

These economic effects are, for the most part, analyzed in broad terms using mainstream macroeconomic and microeconomic principles, which indicate the direction of economic effects but not their precise magnitude. The bases for this analysis, however, are quantifiable statistical relationships between oil price increases (and supply shocks) and macroeconomic variables (see discussion below). One such relationship (between oil price changes and aggregate economic activity) was used to estimate the revenue offsets in Section III. The precise magnitudes of the feedback effects on other economic variables would have to be estimated with econometric models of the energy industry and the macroeconomy, such as are available by Data Resources, Inc., Wharton, and Chase Econometrics.

A. The "Macroeconomy"

1. Some General Comments and Numerical Effects

An oil import tax that is passed forward into higher prices would tend to adversely affect the performance of the U.S. economy. In the context of the current upswing in the business cycle, the rate of economic growth would tend to slow; and the rate of price inflation and the unemployment rate would tend to increase.

Based on studies of the macroeconomic effects of foreign oil price increases, a rise in the price of crude oil of 10 percent would temporarily reduce economic activity by approximately 0.25 percent, assuming no change in monetary policy; a crude oil price rise of about 50 percent would reduce economic activity by about 1 percent. 26/ Thus, assuming the average crude oil price was $20 per barrel and a $10-per-barrel oil import tax was shifted forward completely (in the form of a $10-per-barrel price increase), real Gross National Product (GNP) that would otherwise grow by, say, 3 percent in 1986, would increase by only 2 percent. 27/ Eventually, GNP growth would revert to its long term rate--as determined by the growth in factor inputs and their productivity--but not to the level it otherwise would have reached. The gap between the "actual" and potential annual totals would constitute output (and income) that would be permanently "lost."

Under a $5 tax and full pass-through, consumer prices would increase fairly quickly--boosting any rise in the Consumer Price Index by about one percentage point after a year. The implicit price deflator of GNP would increase by somewhat less. After a few years, the inflationary effects of an oil import tax would subside. The result would be a new higher price _level_,

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26/ For a listing and summary of several such studies, see Impacts of World Oil Market Shocks on the U.S. Economy. U.S. Energy Information Administration. July 1983. 49 p.

27/ The authors recognize that there is a distinction between an oil price shock and an oil import tax in the way they affect the macroeconomy. In the case of the tax, foreigners do not receive any of the price increase. This tends to suggest that smaller adverse macroeconomic effects from a price increase resulting from a tax than from an oil price shock. The estimates in this report are adjusted to reflect this important difference.

changing at rates determined basically by monetary and fiscal policy. In the event of an economic recession, an oil import tax would cause the level of real GNP to decline further than it otherwise would, exacerbating the recession and inflation simultaneously.

While a substantial oil import tax itself would be conspicuous, the general consequences of one, although present, may not be noticeable, as those effects could well be overwhelmed by other current economic forces, such as the steep decline in oil prices, or by responses in the economy to past changes in energy prices or to other factors.

2. The Macroeconomic Responses

By tending to slow the rate of decline in oil prices, an oil import tax would tend to slow any increase in the aggregate supply and/or aggregate demand for goods and services in the economy that would otherwise occur. It is assumed here, as earlier, that there is no change in monetary policy.

Aggregate supply would grow more slowly because higher oil and other energy prices would reduce the amount of energy and other inputs businesses can afford. Reduced use of labor and capital could increase unemployment rates and lower utilization of or investment in fixed capital. The degree of such effects would differ among industries, depending upon the production technology of each industry. In the very long run, employment would rise if labor is a substitute for oil, or energy. 28/ (See "Long Run Effects," below.)

28/ In an advanced industrial society such as the United States, labor is a substitute for oil in the sense that, in any particular production or consumption activity, more labor and less oil is used when the price of oil rises relative to that of labor. In the economy as a whole, production of energy-intensive goods and services would tend to be lower, and production of labor-intensive goods and services would tend to be higher. This is what

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The effect of an oil import tax on aggregate demand would depend on how the revenues are used. If they are used to cut the current Federal budget deficit, Government demand for goods and services would fall--lowering aggregate demand. If the revenues are used, as some have suggested, to finance income tax cuts, there would be no reduction in Government demand for goods and services--and no further reduction in aggregate demand. (Adverse output and employment effects of an oil import tax could be mitigated or offset by the monetary authorities, but at the risk of accelerating the rate of inflation.)

3. Long-Term Effects

An oil import tax could also affect the economy's long-run growth potential, through the effect of higher energy prices. Economic evidence suggests that energy and capital tend to be complementary, and that the quantity of physical capital per worker is a major source of economic growth. 29/ Since lower crude oil prices would increase energy use and the amount of capital investment, energy-capital complementarity and a slower decline in oil prices imply less accumulation of capital and, therefore, slower economic growth in the short run. There would be a loss of output that would never be recouped, but the long run effects on the rate of growth probably would be negligible,

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(28/ continued) tended to occur as a result of the energy price shocks of the 1970s. Analyses describing such shifts include: Hirst, Eric, et al. Recent Changes in U.S. Energy Consumption: What Happened and Why. Oak Ridge National Laboratory. February 1983; Hudson, E. A., and Dale Jorgenson. "Energy Prices and the U.S. Economy, 1972-1976. Natural Resources Journal. Vol. 18, No. 4 (October 1978). pp. 877-897; Marlay, Robert C. "Trends in Industrial Use of Energy." Science. Vol. 226, December 14, 1984. pp. 1277-1283.

29/ Two goods are considered to be complements when they are generally used together, and a decrease (increase) in the price of one tends to encourage (discourage) the use of the other. Complementarity is, in a way, the opposite of substitutability.

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as the economy's growth rate potential is determined by the growth in factor inputs and their productivity.

Energy prices would be higher in the long run as a result of the effect of an oil import tax on the efficiency at which the economic system functions, as well as the result of any passthrough of the tax. The former is discussed in greater detail in part "B" of this section.

4. Some Uncertainties

In addition to the relatively straightforward macroeconomic considerations discussed above, there are some less probable, but still possible, circumstances in which the imposition of a sizable oil import tax carries with it significant economic uncertainty. For example, a change in trend in crude oil prices, combined with an oil import tax, could pose a major risk to economic performance. The adverse effect of presently declining oil prices on the oil producing countries (which probably would be worsened by a U.S. oil import tax) could provide an incentive for OPEC, or Saudi Arabia in particular, to drastically reduce oil production. Under these circumstances, the decline in oil prices would be reversed; and, possibly, oil prices would increase to previous higher levels. An oil import tax, especially of $10 per barrel, imposed at a time of higher and rising oil prices, could create major supply shocks in the U.S. economic system similar to those that occurred in

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(29/ continued)

These concepts become complicated when the "goods" are both complements and substitutes, as in the case of the factors of production. Then, the main effects derive from the complementarity (or substitutability) of the composite of the two inputs with one or more other inputs, according to Hogan. For example, capital and energy are substitutes, but used together their complementarity is greater; and, as a composite, they and labor are substitutes. See Hogan, William W. Capital-Energy Complementarity in Aggregate Energy-Economic Analysis. Resources and Energy, October/November 1979. p. 201-230.

the 1970s. This would also pose problems for monetary and fiscal policies. The recessionary effects of these oil supply-price shocks could be prevented by expansionary monetary or fiscal policies, but only at the risk of higher rates of inflation and continued fiscal crises.

Another scenario is one in which no part of an oil import tax is shifted forward as a increase in price--foreign suppliers pay the entire tax. 30/ This could happen if foreign producers could not change their output (it would be completely inelastic) or if, in response to the tax, they further increase output (widening the present glut in world oil). In this unlikely and unstable case, an oil import tax would not produce any supply shock effects on the domestic economy. The only macroeconomic effects would be as a result of an increase in tax revenues, which would reduce Federal budget deficits. Smaller budget deficits would tend to lower interest rates and stimulate investment demand. In the long-run, smaller Federal Budget deficits could be beneficial to the economy as more capital would be available for the private sector.

B. Resource Allocation and the Efficiency Rationale

1. Modifying the Mix of Inputs and Outputs

At the same time an oil import tax would affect the overall levels of econnomic activity and of prices, so the proportions of goods and services produced and the factors of production used would differ from what they would be without a tax. That is, the allocation of resources would be different.

30/ For example, a $5 tax imposed when market prices are $20 per barrel would cause no change in the price (now including the tax), and foreign suppliers would receive only $15 per barrel.

Higher energy prices than otherwise would lead to less energy use and to less of other resources devoted to energy-intensive producing and consuming activities--such as mining, paper and metal manufacturing, Sunday driving, and warm houses on cold nights. But more resources would be devoted to oil exploration and production. Relatively more labor and relatively less capital and land would be used than without an import tax, and fewer economic resources would be expended to purchase foreign oil. 31/

2. The Question of Allocative Efficiency

Some proponents of an oil import tax argue that a change in resource allocation of the kind described above would result in a more efficient allocation, assuming the tax is not set too high or low. Allocative efficiency refers to a particular configuration of resources (the relative amounts used by the various sectors of the economy) in which the marginal costs of production equal the marginal benefits -- including all social and other "external" costs and benefits. Thus, efficiency in this case is not concerned with efficiency in individual production processes.

Based on economic analysis of the issues, however, the efficiency rationale for an oil import tax seems, at best, exaggerated. Distortion of relaative prices by the tax probably would not tend to promote efficiency in resource use.

31/ See the earlier discussion of energy-capital complementarity. Less land probably would be used because mining and agriculture (the latter a heavy user of energy-intensive fertilizers and pesticides) are land-intensive.

(a) "Social Costs" and Market Failures

According to a popular argument for an oil import tax, oil importation results in a social cost to the U.S. economy that the energy market does not and cannot factor into the economic calculus, and therefore the market sets the price of imported oil "too low," and the quantity of oil imports is "too high". Also, because imported oil determines the price of all oil sold in the United States, the price of all oil (and energy) is too low, and more oil and other energy sources are used than if their prices reflected the social costs. Such excesses, the argument says, constitute an inefficient allocation of resources.

According to economic theory, a social cost is an external cost to society associated with a particular economic activity that producers or users in a free, competitive market system do not take into account (because there are no economic incentives to do so) for purposes of making basic economic decisions relating to that activity (such as what to produce, how to produce it, what to consume, and how to consume). If a firm's competitive level and composition of output does not reflect the "true" cost of that production, including all private and social costs, the price of the output probably would be lower and the quantity would be greater than what would be called for in an allocatively efficient economic system. There is a market failure in this case, resulting in an allocation of resources in which society would be less well off than if social costs could somehow be reflected in accounting costs (i.e., "internalized").

The types of social costs that a free market is unable to account for relate to the cost to U.S. society of being "overly" dependent upon oil imports from foreign countries that are politically unstable or perhaps unfriendly to the United States. More specifically, these costs have been identified as:

(1) the weakened defense posture and greater military vulnerability of the United States in the event of an embargo or supply disruption; 32/ the cost of allocating a greater quantity of resources towards defense in order to maintain the level of national security preferred (compared with the quantity that would be allocated with much lower oil imports); and (2) the economic and social costs in terms of unemployment, inflation, and shortages that would result from an effective oil embargo, or rapid oil price increases.

There appears to be some validity to the argument that oil importation poses national security risks that impede economic efficiency. An oil import tax set at the correct rate would, by reducing the level of oil imports, reduce (but not necessarily fully eliminate) the impact of an embargo and, therefore, reduce national security risks. 33/

Another source of allocative inefficiency in this context arises from any failure of the world oil market to be organized competitively. To the extent the world oil market is (still) best--in terms of results--characterized as a cartel that basically behaves as a single monopolist, output and prices will be above their true scarcity values. And the configuration of use of petroleum and of the various factors of production will be less efficient than that under a fully competitive oil market.

32/ Some of the oil import literature differentiates between import dependence and vulnerability to disruptions. See: U.S. Library of Congress. Congressional Research Service. Western Vulnerability to a Disruption of Persian Gulf Oil Supplies: U.S. Interests and Options. Report No. 83-24 F, by the Economics Division, Foreign Affairs and National Defense Division, and Environment and Natural Resources Policy Division. March 24, 1983.

33/ It could be argued that the revenues from an oil import tax that is intended to reduce national security risks should be used to finance a reserve of oil (such as the Strategic Petroleum Reserve) to be used in case of a supply interruption. It is not clear how such an earmarking would affect economic efficiency if the tax is already at the correct rate.

(b) Some Caveats

Several points appear to weaken the social cost rationale. First, care must be exercised in ascertaining the components of social costs. For example, an increase in demand for oil imports would, other things being equal, tend to raise the price for all imported oil and not just for the marginal importer. This price effect is a normal "pecuniary externality," which the market internalizes, and it is true of all markets, not just the oil import market. Also, the macroeconomic and industry effects of an oil price shock or embargo are, in large part, internalized by the market; and many analysts would argue against including these as social costs. In other words, much of the popular "social cost" argument for an oil import tax does not relate to externalities that the market system cannot take into account. Rather, it is a value judgement that the market adjustment that does occur is too costly.

Second, there may not be social costs of oil importation. Some analysts argue that importing oil actually improves national security because a larger stock of domestic oil resources is left for use in emergencies. Some may argue that any national security-related social cost of oil imports has been greatly reduced, and paid for, in the form of the Strategic Petroleum Reserve.

Third, even accepting the presence of oil import social costs, imposing a tax on oil import has its own costs associated with it, such as reduced aggregate output, greater unemployment and a rise in prices. Further, an oil import tax would actually tend to increase social costs by increasing environmental pollution domestically. This would occur because a tax would stimulate domestic production of crude oil and other energy substitutes such as natural gas and coal. If the social costs of greater domestic energy output are larger, then economic efficiency would argue for a tax on domestic production and/or a subsidy for imported oil (rather than a tax).

Fourth, world oil prices are declining to levels that probably more accurately reflect the actual underlying economic scarcity of oil. A tax would tend to push oil prices back up toward monopoly levels, which would reverse the trend toward greater efficiency in resource allocation.

It is also important to note that, in an economic analysis of the oil import premium, the presence of social cost per barrel is assumed a priori. But, in practical applications, the oil import premium would be based on actual empirical estimates of the aforementioned social costs which would be imputed to oil imports. This raises the problem of determining the optimal rate of tax required to achieve economic efficiency. There is no reason to believe that either a $5 or $10 tax per barrel is optimal. [34]

C. Income Distribution

An oil import tax, like any other tax, would tend to affect the distribution of real income among sectors and across income brackets. More specifically, the oil import tax would tend to redistribute income away from foreign oil producers, and domestic consumers (including energy intensive industries, and toward the U.S. Federal Government, domestic oil producers, and other domestic energy producing sectors. This effect, except for the Federal Government's increase in real income, is particularly sensitive to the degree of pass-through of the tax. In the extreme case that the tax is not shifted forward at all, then foreign oil producers would pay all of the tax--the redistribution would be from foreign oil producers to the Federal Government.

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[34] Attempts to estimate the oil import premium have resulted in widely disparate estimates. See Broadman, Harry G. Review and Analysis of Oil Import Premium Estimates. Discussion Paper D-82 C, December 1981. Resources for the Future, Washington, D.C.

Table 6. Estimated Partial Effects of a $5 per Barrel Oil Import Tax, 1986
(billions of dollars)

	Price Scenario A	
	50% Pass-through	80% Pass-through
Federal Government a/	+12.1	+13.6
Foreign Oil Producers	-8.9	-9.2
Domestic Oil Producers b/	+2.0	+3.1
Domestic Oil Consumers	-11.2	-17.5

Note: The components shown here do not reflect or constitute all financial effects of an oil import tax.

a/ The increase shown here is the net revenue effect (taking account of offsets. (See table 2.)

b/ This is the net increase in producers' income after costs and taxes.

Source: Authors' estimates.

It should be noted that the increase in income of domestic oil producers would be limited by the corporate income tax and the crude oil windfall profit tax. Without these taxes, their income would be higher by about 43 percent under each pass-through scenario; the income of the Federal Government would be lower by about 43 percent. (See table 6 for estimated effects.)

An oil import tax would also affect the way in which income is distributed over the U.S. population by income bracket. More specifically, the percentage reduction in income in response to an oil import tax tends to decline as the level of household income increases. The magnitude of these effects depend upon the size of the oil import tax, the extent to which the tax is passed through to buyers, and what the Government does with the tax revenues.

The nature of these income distribution effects is suggested in table 7. The data show (a) the ratio of fuel oil and gasoline spending to income de-

Table 7. Expenditures for Energy and Food by Level of Household Income

Quintiles	1981 Average Income	Average Expenditures for Fuel Oil, Gasoline, and Other Fuels			Average Expenditure for Total Energy			Food Expenditures as % of Average Income	
		Dollars in 1981	% of Income 1981	% of Income 1973	Dollars in 1981	% of Income 1981	% of Income 1973	1981	1973
1st	$3,901	$535	13.7%	6.4%	$971	24.9%	7.2%	30.5%	32.3%
2nd	9,838	882	9.0	5.5	1,464	14.9	9.4	15.5	18.1
3rd	16,594	1,125	6.8	4.7	1,767	10.7	7.7	11.3	13.5
4th	24,560	1,367	5.6	3.9	2,143	8.7	6.3	9.4	11.0
5th	42,769	1,702	4.0	2.7	2,659	6.2	4.3	6.2	7.3

Source: U.S. Department of Labor. Bureau of Labor Statistics. Consumer Expenditure Survey: Diary Survey, 1980-81. Bulletin 2173, September 1983. Washington, 1983. Table 2.

clines as income increases, (b) the ratio of expenditures for all of energy (including electricity and natural gas used in the home) to income is higher at lower incomes than the ratio of expenditures for fuel oil and gasoline only; (c) between 1973 and 1981--a period of rapidly rising energy prices--the ratio of total energy expenditures to income rose faster among lower-income families than among higher income families; and (d) the distribution of total energy spending became nearly as concentrated as spending for food consumed at home. [35] More recent data on the distribution of energy expenditures is not available. While the decline in oil prices since 1981, and particularly since December 1985, probably has made the distribution of energy spending somewhat less concentrated, it is unlikely to have changed significantly the basic pattern of energy spending by income level.

These data give a general picture of the distributional effects of an oil import tax by income bracket. First, lower income persons will benefit more from the recent declining energy prices than higher income persons. Second, to the extent that the oil import tax keeps oil prices higher than otherwise, the tax paid as a percentage of income would decline, on average, as income increases. In the economic literature this tax burden distribution is called regressive, and it would tend to offset the otherwise progressive structure of Federal income taxes. The magnitude of this effect should not be overstated, however, because the oil import tax revenues would still represent a negligible fraction of the nearly $800 billion in tax collections estimated for 1986.

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[35] Other studies tend to show spending distributions similar to that in table 7. See U.S. Congressional Budget Office. Low Income Energy Assistance: Issues and Options. Washington, U.S. Govt. Print. Off., July 1981. p. 9, 13; U.S. Department of Energy. Energy Information Administration, 1980. Report to Congress. Volume Two: Data. April 1981. Washington, 1981. p. 47.

In addition to the short-term distributional effects, the oil import tax has a dynamic effect on the real income distribution. In time, the higher crude oil prices will cause the price of other energy forms, such as natural gas, electricity, and coal to be higher than otherwise. Because total energy spending is more concentrated in lower incomes than is fuel oil and gasoline spending, the oil import tax would tend to be more regressive in the long run than in the short run.

D. Other Economic Issues

This final section of the report discusses four economic issues, which are important to policymakers but about which few definitive conclusions can be made: (1) regional economic effects, (2) the international competitiveness of U.S. industries; (3) implications for the U.S. banking industry; and (4) U.S. trade and other international economic matters.

1. Regional Economic Effects

The pattern of benefits and costs of an oil import tax would be distributed geographically within the U.S. depending upon whether a particular region is a net oil producer or a net oil consumer. In the case of oil production, these regional effects are clearer than in the case of oil consumption.

Domestic crude oil production is heavily concentrated in Texas, Alaska, California, and Louisiana, which account for about three-fourths of total U.S. production. 36/ By raising the price of crude oil, an oil import tax would

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36/ Energy Information Administration. Petroleum Supply Annual, 1984. Vol.1. June, 1985. Washington, 1985. p.45.

benefit the oil producing industry in these States, which has been hit hard by the collapse in world oil prices. Expanded industry profits would stimulate State economic activity; personal incomes and State and local government tax revenues would grow.

Petroleum consumption is less concentrated in any particular region of the U.S. than production. The regional pattern of petroleum consumption depends upon the type of petroleum product which is used for final consumption. To illustrate, heating oil use is heavily concentrated in the Northeastern States (particularly in New York, New Jersey, Massachusetts, and Connecticut). 37/ An oil import tax, to the extent it is shifted forward into higher heating oil prices, would tend to adversely affect consumers in these States. 38/

Much of U.S. petroleum use is accounted for by the industrial and transportation sectors, which account for 25 percent and 62 percent of total consumption, respectively. Consumption in each of these sectors differs somewhat across regionals. Industrial petroleum consumption tends to be very high in Texas, California, and Louisiana -- the same States that produce the bulk of domestic crude oil. Texas, in particular, is the single largest petroleum consuming State due to its heavy concentration of refineries and petrochemical plants. The other States with large quantities of industrial petroleum use are located, as expected, in the industrial heartland (these include Ohio, Michigan, Illinois, and Pennsylvania).

37/ Energy Information Administration. State Energy Data Report: Consumption Estimates, 1960-1983. DOE/EIA-0214 (83), May 1985. Washington, 1985. p.9.

38/ Consumers includes businesses and governments, which for certain States tend to be heavy users of heating oil.

California, Texas, Florida, New York, Pennsylvania, and New Jersey are the largest users for transportation. Large, sparsely populated Western and Southwestern States would be hardest hit by an increase in motor fuel prices; smaller, more densely populated Eastern, Northeastern, and Midwestern States states would suffer a smaller impact. 39/

Further complicating analysis of regional effects of an oil import tax, the long-run consequences will differ from the short run effects. The ultimate costs and benefits to consumers and producers after the increase in crude oil prices gets fully reflected in variously higher prices of all energy forms and of energyintensive products may not be the same as the costs and benefits of the initial oil price change. Thus, while Texas is a large industrial user of petroleum and would "pay" more for energy (for heat and power and/or for feedstock), much of the impact of that cost increase would fall on users of the end-products in other States. 40/

2. International Competitiveness of U.S. Industries

An oil import tax initially would tend to generally worsen the competitive position of U.S. industries. Energy costs of domestic energy-intensive industries--such as petrochemicals, paper, and primary metals--would tend to increase, while lower oil, and energy, prices abroad would lower production costs of competing foreign industries. Moreover, a higher general price

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39/ Energy Information Administration. State Energy Data Report, 1983. p. 8. Petroleum use in transportation is even more dispersed geographically.

40/ For additional analysis of regional effects see U.S. Library of Congress. Congressional Research Service. The Interstate Distribution of the Burden of Energy Taxes: A Comparison of the Oil Import Tax and the Gasoline Excise Tax. Report No. 86-637 E. by Salvatore Lazzari. March 25, 1986.

level in the United States (see discussion of macroeconomic effects) would raise production costs for all exporting U.S. industries. The appreciation of the dollar resulting from a lower oil import bill would also tend to make U.S. goods less competitive in foreign markets.

Other, slower-working, dynamics eventually would tend to benefit U.S. industries, however, and offset the above effects. A smaller Federal budget deficit (resulting from oil import tax revenues) would lead to lower interest rates and less inflow of foreign capital, bring down the dollar's exchange rate, and generally help the international competitive position of U.S. industries. The net effect wouold vary among industries, depending to a considerable extent on energy-intensiveness.

3. Financial Sector Impacts

An oil import tax would tend to mitigate the adverse effect that declining oil prices are having on smaller banks and other financial institutions in oil-producing States, such as Texas, Alaska, and Louisiana. But it would tend to worsen the outlook for large banks with loans to countries that sell oil to the United States (particularly Mexico and Venezuela). The fear that a failure of one of the energy-dependent banks would trigger a financial crisis would be eased in some cases and aggravated in others.

On the other hand, an oil import tax would moderate the benefit to both banks in energy-consuming States and the U.S. banking industry in general from the stimulating effect on the economy of the drop in oil prices. In assessing these financial effects, however, it is worth remembering that much of the current financial difficulty stems from actions taken in response to the sharp oil price increases of the 1970s.

4. International Effects

Initially, the U.S. merchandise trade balance would tend to improve with an oil import tax. The lower quantity of imports combined with a lower price of oil received by foreign producers would reduce the dollar amount of the oil import bill. The imbalance in the international currency market would, however, cause the dollar to appreciate -- contracting exports and expanding non-oil imports. The decline in U.S. oil imports would tend to lower world oil prices and raise real incomes in other energy-consuming nations (e.g., Japan and the Western European countries), which also would tend to affect trade flows. But these income effects probably are smaller than the initial oil price and exchange rate effects.

The eventual result would be a contraction in the overall size of U.S. trade and a change in the composition of that trade, but little change in the net merchandise trade balance.

The net effect on the U.S. balance of payments is less clear. Lower profits of U.S. multinational oil companies implies a lower level of remittances to the United States. Declining revenues of foreign oil-producing nations would tend to reduce capital flows to the United States. And, if the revenues from oil import tax are used to reduce the Federal budget deficit, interest rates could decline and lower the attractiveness of the United States as a place of investment. These longer term effects could cause the dollar to depreciate; and, if so, make U.S. goods less expensive in the rest of the world and goods from abroad more expensive in the United States.

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PETROLEUM IN THE UNITED STATES: SELECTED DATA FOCUSED ON THE OIL IMPORT TAX ISSUE

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December 31, 1986

ABSTRACT

Data have been selected, and presented in tabular form, in order to provide policymakers with recent and historical statistics relevant to the issues that concern proponents and opponents of an oil import tax.

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PETROLEUM IN THE UNITED STATES: SELECTED DATA FOCUSED ON THE OIL IMPORT TAX ISSUE

INTRODUCTION

Many in the U.S. oil industry, and some Members of Congress, have proposed an oil import "fee," or tax, as a means of raising oil prices to levels that would encourage domestic oil exploration and development, and also prevent a permanent shrinkage of the domestic industry. In the wake of the sharp drop in world oil prices, U.S. petroleum producers have suffered financial losses, cut employment, and greatly reduced exploration for and development of domestic oil resources. At the same time, U.S. imports of petroleum have risen significantly.

Data have been selected, and presented in the following tables, in order to provide policymakers with basic recent and historical statistics -- in a convenient form -- relevant to the issues that concern proponents of an oil import tax. A previous CRS report presented estimates of the gains in Federal revenues from an oil import tax, and analyzed the effects of such a tax on energy markets and various other aspects of the economy. 1/

The tables cover various aspects of U.S. petroleum production, use, prices, and trade, and the relationships of these variables to broader economic variables.

1/ U.S. Library of Congress, Congressional Research Service. Oil Import Taxes: Revenue and Economic Effects, by Bernard A. Gelb and Salvatore Lazzari. Report No. 86-572 E. May 28, 1986. 64 p.

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Table 1. Major Components of U.S. Petroleum Supply and Disposition
(millions of barrels per day)

		1972	1977	1979	1985	1986E
Crude oil production		9.44	8.24	8.55	8.97	8.79
Natural gas plant liquids		1.74	1.62	1.58	1.61	1.57
Refinery processing gains		0.39	0.52	0.53	0.56	0.56
Imports:	crude oil	2.22	6.61	6.52	3.20	4.13
	SPR a/	(-)	(0.02)	(0.07)	(0.12)	(0.05)
	refined products	2.53	2.19	1.94	1.87	1.91
	Total	4.74	8.81	8.46	5.07	6.04
Exports:	crude and refined	0.22	0.24	0.47	0.78	0.75
Petroleum products supplied b/		16.37	18.43	18.51	15.73	16.04

E = Estimates, based on first 10 or 11 months.

a/ Strategic Petroleum Reserve. Figures shown are included in total crude oil imports.

b/ This is an approximation of domestic petroleum consumption.

Note: Components shown do not comprise all types of flows of supply and disposition of petroleum. Components omitted include changes in inventories and other types of refinery imputs.

Sources: Energy Information Administration, U.S. Department of Energy; CRS estimates.

Table 2. Oil and U.S. Merchandise Trade
(billions of dollars, except where indicated)

Year	Crude Oil and Petroleum Products Imports a/	Exports b/	Balance	Total U.S. Trade Balance c/	Oil as a % of Total d/
1972	4.9	0.4	- 4.5	- 9.1	49
1976	37.4	1.0	- 36.4	- 17.1	213
1980	82.0	2.8	- 79.2	- 36.2	219
1983	55.3	4.6	- 50.7	- 69.3	73
1986E	38.2	3.7	- 34.7	- 167.9	21

E = Estimates, First 10 months at annual rates

a/ General imports, c.i.f.

b/ Exports, including re-exports, f.a.s.

c/ General imports less exports (including re-exports)

d/ Percentages calculated from unrounded figures.

Sources: Bureau of the Census, U.S. Department of Commerce.

Table 3. U.S. Petroleum Imports by Country of Origin
(millions of barrels per day)

Country or Group	1972	1977	1979	1981	1985	1986E
OPEC - Total a/	2.06	6.19	5.64	3.32	1.83	2.85
Algeria	.09	.56	.64	.31	.19	.29
Saudi Arabia	.19	1.38	1.36	1.13	.17	.67
Arab OPEC b/	.53	3.19	3.06	1.85	.47	1.20
Indonesia	.16	.54	.42	.37	.31	.31
Nigeria	.25	1.14	1.08	.62	.29	.40
Venezuela	.96	.69	.69	.41	.61	.75
Non-Arab OPEC c/	1.53	3.01	2.58	1.48	1.36	1.65
Canada	1.11	.52	.54	.45	.77	.77
Mexico	.02	.18	.44	.52	.82	.71
United Kingdom	.01	.13	.20	.38	.31	.40
Virgin Islands & Puerto Rico d/	.43	.57	.52	.39	.28	.27
Other	1.11	1.22	1.12	.94	1.07	1.04
Total	4.74	8.81	8.46	6.00	5.07	6.04

E = Estimates

a/ OPEC - Organization of Petroleum Exporting Countries.

b/ Includes Iraq, Kuwait, Libya, Quatar, and United Arab Estimates, as well as Algeria and Saudi Arabia.

c/ Includes Ecuador, Gabon, and Iran, in addition to Indonesia, Nigeria, and Venezuela.

d/ Oil "imported" from these areas almost entirely consists of petroleum imported from other countries that was refined in Puerto Rico and the Virgin Islands, and shipped to the United States for use.

Note: Some petroleum imported into the United States, primarily from Caribbean and West European Areas, represents petroleum products that were refined from crude oil produced in OPEC countries.

Sources: Energy Information Administration, U.S. Department of Energy; CRS estimates.

Table 4. U.S. Prices of Crude Oil and Selected Petroleum Products
(current and constant dollars)

	1972	1975	1979	1981	1986E
Crude Oil ($ per barrel) a/					
current $	3.39	7.67	12.64	31.77	12.90
1982 $	7.29	12.93	16.08	33.80	11.27
Regular gasoline (cents per gallon) b/					
current $	36.1	56.7	85.7	131.1	92.5
1982 $	77.6	95.6	109.0	139.5	80.8
No. 2 fuel oil (cents per gallon) c/					
current $	11.2	27.5	56.9	97.6	46.5
1982 $	24.1	46.4	72.4	103.8	40.6
No. 6 residual oil (cents per gallon) c/					
current $	8.9	25.9	39.9	66.3	30.0
1982 $	19.1	43.7	50.8	70.5	26.2

E = Estimates, based on data for 10 or 11 months

a/ Wellhead price.

b/ Retail price, including taxes

c/ Wholesale price. Data for 1972 and 1975 are estimated.

Sources: Independent Petroleum Association of America. Bureau of Economic Analysis, U.S. Department of Commerce; Energy Information Administration, U.S. Department of Energy; CRS estimates.

Table 5. U.S. Oil and Gas Exploration and Development

	1972	1981	1985	1986 a/
Seismic crews engaged b/	251	681	378	195
Onshore	239	637	333	172
Offshore	12	44	45	23
Rotary rigs in operation	1,107	3,970	1,980	960
Onshore	1,030 c/	3,714	1,774	865
Offshore	77 c/	256	206	95
Wells completed d/ (thousands)	27.93	90.13	70.22	41.00

a/ - Estimates, based on first 10 or 11 months.

b/ - Crews engaged in seismic exploration.

c/ - Estimates, based on succeeding years' relationships.

d/ - Exploratory and development well completions. Includes oil, gas, and dry holes.

Sources: Hughes Tool Company, Petroleum Information Corporation, and Society of Exploratory Geophysicists, as published in the Oil and Gas Journal (PennWell Publishing Company), and the Energy Information Administration, U.S. Department of Energy.

Table 6. Distribution of U.S. Energy Use by Source and Consuming Sector, 1985
(quadrillion BTU)

Consuming Sector	Petroleum	Natural Gas	Coal & Coke	Hydro power	Nuclear power Energy Inputs	Sector Primary Electricity	Use of Utility Energy Inputs	Total Sector
Residential	1.41E	4.54E	0.07E	---	---	6.02E	2.74E	8.76E
Commercial	1.17E	2.52E	0.11E	---	---	3.80E	2.31E	6.11E
Industrial	7.70	7.13	2.76	0.03	---	17.62	2.81	20.43
Transportation	19.55	0.53	a/	---	---	20.07	0.01	20.09
Electricity generation, utilities	1.09	3.15	14.54	3.29	4.16	26.45	7.88 b/	18.56 c/
Total energy inputs by source	30.92	17.87	17.48	3.32	4.16	73.95	NA	73.95

E = Estimated.

BTU = British thermal unit

NA = Not applicable

a/ less than 0.005 quadrillion BTU

b/ Distributed to other sectors.

c/ Electrical distribution system energy losses.

Note: Details may not add to totals, due to rounding.

Source: Energy Information Administration, U.S. Department of Energy; CRS estimates.

Table 7. Strategic Petroleum Reserve
(millions of barrels, except as indicated)

Year	Acquisitions		End of Year Stock		
	Imports	Domestic	Quantity a/	% of Primary Petroleum Stocks b/	Days of Net Imports
1977	7.5	0.4 c/	7.5	0.6%	1
1978	58.8	-	66.9	5.2	8
1979	24.4	d/	91.2	6.8	11
1980	16.1	1.3	107.8	7.7	17
1981	93.3	28.8	230.3	15.5	43
1982	60.2	3.8	293.8	20.5	68
1983	85.3	0.4	379.1	26.1	88
1984	72.0	d/	450.5	28.9	96
1985	43.1	0.2	493.3	32.5	116
1986E	18.2	1.2	512.7	31.7	97

E = Estimates based on first 10 or 11 months.

a/ Excludes imported quantities in transit to SPR terminals, pipeline fill, and above-ground storage.

b/ Inventories of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve, is included. Stocks of foreign origin that are held in bonded warehouse storage are excluded.

c/ Domestic fuel oil in storage prior to injection of foreign crude oil.

d/ Less than 0.005 million barrels.

Source: Energy Information Administration, U.S. Department of Energy.

Table 8. Residental Petroleum Use by State, 1984

State	Percent of Petroleum Use	Percent of Total Energy Use
Alabama	0.9	0.3
Alaska	4.0	1.7
Arizona	*	*
Arkansas	1.7	0.7
California	*	*
Colorado	0.5	0.2
Connecticut	12.5	8.3
Delaware	7.3	4.3
District of Columbia	6.8	2.0
Florida	0.3	0.2
Georgia	0.2	0.1
Hawaii	*	*
Idaho	3.4	1.0
Illinois	1.0	0.4
Indiana	2.6	0.8
Iowa	2.0	0.7
Kansas	0.1	0.1
Kentucky	2.1	0.8
Louisiana	*	*
Maine	11.0	6.9
Maryland	7.8	3.4
Massachusetts	13.5	8.6
Michigan	4.1	1.3
Minnesota	4.1	1.7
Mississippi	0.2	0.1
Missouri	0.8	0.3
Montana	1.8	0.8
Nebraska	1.0	0.4
Nevada	1.2	0.6
New Hampshire	15.1	9.8
New Jersey	9.0	5.0
New Mexico	0.8	0.4
New York	10.4	5.2
North Carolina	5.7	2.3
North Dakota	4.7	2.2
Ohio	2.2	0.7
Oklahoma	0.1	*
Oregon	3.8	1.5
Pennsylvania	10.4	3.8
Rhode Island	18.2	9.6
South Carolina	2.6	0.9
South Dakota	4.2	2.2

State	Percent of Petroleum Use	Percent of Total Energy Use
Tennessee	1.1	0.4
Texas	0.1	*
Utah	0.7	0.2
Vermont	21.3	11.4
Virginia	5.5	2.4
Washington	3.3	1.1
West Virginia	1.6	0.5
Wisconsin	6.9	2.5
Wyoming	1.6	0.6
United States	3.3	1.4

* Less than 0.05 percent

Note: Data include distillate oil and kerosene. Liquefied petroleum gases are excluded, as these are mainly derived from natural gas.

Source: Energy Information Administration, U.S. Department of Energy.

Table 9. Estimated Fuel and Non-Fuel Use of Petroleum and Gas Liquids by the Industrial Sector, 1985
(millions of barrels per day)

	Use Category		
Product Category	Fuel	Non-Fuel	Total
Liquefied petroleum gases	0.53	0.70	1.23
Distillate fuel oil a/	0.56	---	0.56
Asphalt and road oil	---	0.42	0.42
Petrochemical feedstocks	---	0.39	0.39
Residual fuel oil	0.33	---	0.33
Motor gasoline a/	0.08	---	0.08
Special naptha	---	0.08	0.08
Lubricants	---	0.07	0.07
Petroleum coke	---	0.06	0.06
Kerosene	0.03	---	0.03
Wax	---	0.02	0.02
Other	0.77	0.06	0.83
Total	2.30	1.80	4.10

a/ Excludes use for transportation.

Note: The Energy Information Administration defines the industrial sector to include manufacturing, mining, construction and agriculture.

Source: Energy Information Administration, U.S. Department of Energy.

Table 10. Relative Burden of Energy and Oil Costs in Manufacturing
(billions of dollars, except where indicated)

Selected Industry (and SIC No.)	Energy Purchases a/ Total	Oil b/	Value Added c/	Energy Cost as % of Value Added d/ Total	Oil
			1984		
All manufacturing	63.16	NA	983.65	6.4	NA
Weaving mills, synthetics (2221)	.38	NA	4.01	9.5	NA
Pulp, paper, & paperboard mills d/	4.97	NA	18.00	27.6	NA
Plastics materials & resins (2831)	1.08	NA	7.65	14.1	NA
Organic fibers, noncellulosic (2824)	.53	NA	4.36	12.2	NA
Industrial organic chemicals (286)	3.77	NA	15.99	23.6	NA
Petroleum refining (2911)	5.77	NA	12.74	45.2	NA
Hydraulic cement (3241)	1.04	NA	2.22	47.0	NA
Blast furnaces & steel mills (3312)	4.89	NA	14.56	33.6	NA
Motor vehicles & car bodies (3711)	.70	NA	27.67	2.5	NA
			1981		
All manufacturing	55.26	4.87	837.51	6.6	0.6
Weaving melts, synthetics (2221)	.30	.02	3.61	8.4	0.6
Pulp, paper, & paperboard mills e/	4.64	1.24	14.06	33.0	8.8
Plastics materials & resins (2821)	.93	.08	5.00	18.6	1.5
Organic fibers, noncellulosic (2824)	.54	.08	3.89	13.9	2.0
Industrial organic chemicals (286)	3.46	.25	16.23	21.3	1.6
Petroleum refining (2911)	4.38	.24	24.15	18.1	1.0
Hydraulic cement (3241)	1.03	.03	1.97	52.5	1.3
Blast furnaces & steel mills (3312)	5.89	.46	20.20	29.2	2.3
Motor vehicles & car bodies (3711)	.52	.04	15.62	3.3	0.2

SIC = Standard Industrial Classification

NA - Not Applicable

a/ Purchased fuel and electric energy for heat and power.

b/ Distillate and residual fuel oil

c/ Value of shipments less the cost of materials, supplies, containers, purchased fuel and electricity, and contract work.

d/ Percentages based on unrounded figures

e/ SIC 2611, 2621, & 2631. Excludes building paper.

Note: Separate figures on oil purchases were not collected for 1984. Energy cost as a percent of value added differs between 1981 and 1984 partly because of differences in profitability between the years in some individual industries.

Source: Bureau of the Census, U.S. Department of Commerce.

Table 11. Employment in Selected Oil-Intensive
Manufacturing Industries a/, 1985
(thousands)

Selected Industries (and SIC No.)	Employment
All manufacturing	19,426
Pulp, paper, & paperboard mills (2611,2621, 2631)	253
Plastics materials & resins (2821)	74
Organic fibers, noncellulosic (2824)	64
Industrial organic chemicals (286)	164
Petroleum refining (2911)	140
Hydraulic cement (3241)	24
Blast furnaces & steel mills (3312)	238
Selected group subtotal	957

a/ Oil-intensiveness refers here to oil used for heat and power.

Source: Bureau of Labor Statistics, U.S. Department of Labor.

rb

February 9, 1987

Mr. Freddie Hebert
Rt. 1 Box 200
Gueydan, LA 70542

Dear Mr. Johnston:

Hello, may name is Freddie Hebert from Gueydan, LA. Senators, I thank you for your time. I have come here today to tell you that the U.S. alcohol production quota set for 1990 will be far from met.

I have been legally producing moonshine since 1979. Moonshine (or ethanol) has been blended with gasoline since 1978. In 1980 with the Windfall Profit tax it became legal for anyone to make and sell up to 5000 gallons of alcohol with one permit (U.S.C. 26 5181).

Now the main question is: What is ethanol? Ethanol is a distilled liquor made from fermented grain or other substrates. To elaborate on these terms, distilled means to place a liquid in one vessel and vaporize into another. Fermentation means to place grain or other substrates in water and with the addition of yeast it will change into alcohol.

There are many ways to improve this basic method of ethanol production. The process has improved so rapidly over the last ten years, it is now possible to ferment wood, distill the alcohol, and eat the wood.

In 1968 the United Nations recommended that forming yeast, which they called single cell protein, could solve the protein problem of the entire world. The only drawback is the alcohol that is produced. This is not a problem, this is a blessing. Instead of people or their animals starving to death they would have a slight smile, or in other words, they would be slightly intoxicated.

Getting back to the energy problem, if Louisiana would concentrate on teaching its farmers to grow single cell protein (or farm yeast), you could help two struggling groups at one time. The oil people, who sooner or later must accept alcohol as a friend, and the farmers who need new markets for their grain.

The Market Bulletin, a Louisiana agriculture publication, will not print my ads on single cell production. They do not consider this farming. This is the wrong attitude. Yeast, being sixty percent protein, has been proven sucessful in feeding everything from catfish to cattle.

Louisiana has the best ethanol program in the nation with state and federal tax incentives. Producers receive over $2.00 a gallon for ethanol blended with gasoline. At present it is impossible to finance a small scale ethanol plant, even if you base your engineering on the U.S. government publications, Fuel for Farms, or some of the work done by the U.S. Alcohol Fuel Commission's final report in 1980. It stated a farmer could still make a profit at the projected corn price of $4.80 a barrel in 1987. Even with all this government money spent to tell farmers how to produce ethanol, you still need an engineered feasability (which at present cost is about $60,000 for a farm size plant), which is kinda out of proportion when you consider a farmer can put together his own plant using second hand oil field equipment for under $50,000. At least we have, that is myself and a Chemical Engineering profeessor from USL, who is the greatest man I know. We are about to complete the smallest working ethanol plant in Louisiana. We are on the Department of Origin's list of plants soon to be certified.

I come here today to stress the single cell protein issue. If the U.S. government gets behind this U.N. recommendation to teach farmers to turn their surplus grain into yeast production, the resulting byproduct would be ethanol, that could be bought by a central processing plant. Our plant in Gueydan, when fully completed, will take in twelve tons of Louisiana corn daily. With this corn we will produce about one thousand gallons of ethanol and feed one thousand feeder pigs per day.

Well, in closing I would like to give the history students something to think on, the Whiskey Rebellion of 1779. This happened when farmers found out how easy it was to make whiskey and the government found out how much money they could make by taxing this whiskey. It's amazing how they could make alcohol without a feasability study. These farmers started our drinking whiskey industry and today get about $40.00 per gallon, about half of which goes for taxes.

Ethanol can help. But it will take a couple of times waiting in a gas line before most of us realize how much.

I thank you for your time.

Sincerely,

Freddie Hebert

FH/alo

Senate Energy and Natural Resources Committee
Oil and Gas Field Hearings, New Mexico
Senator Jeff Bingaman, Chairman
Senator Pete Domenici, Member

Mr. Chairman:

I respectfully request the following testimony be included in the record of your Senate Energy and Natural Resources Committee, Oil and Gas Field Hearings.

My name is James B. Ramsey and I am offering this testimony on behalf of New Tex, Ltd., Oil - Gas, a small independent oil and gas operating company, and the investors who participate in our drilling programs.

First I would like to express our gratitude to you gentlemen for having the farsight to recognize the problems that have arisen in the domestic oil and gas industry and the dire consequences they hold for the nation as a whole. And secondly for the fortitude to hold these hearings in an attempt to foreworn the nation and alter the disaster course we are currently pursuing.

I agree wholeheartedly with your analysis of OPEC. Though OPEC appears to be in disarray, their overproduction of crude oil and ever increasing share of the domestic market is destroying the very foundation of the United States oil and gas industry. This was substantiated quite well by testimony given at your hearings in Hobbs and Farmington, New Mexico. Once the United States oil and gas industry is crippled past the point of being able to respond and OPEC becomes unified, we will be at their mercy for whatever price they demand.

Unfortunately low prices at the gas pump and a domestic oil and gas industry that is carrying the sole burden in holding down inflation has lulled the American public into a sense of false security and economy. The present administration can boast of low inflation figures, but in reality it has been the domestic oil and gas industry which has borne the burden by a never until now heard of drop in the wellhead price of oil and gas. It makes a person wonder if there were not some manipulation by the present administration to make its economic policies appear good in the short term.

If we sit by and do nothing until OPEC has choked the life from our domestic oil and gas industry, what will happen to our national security? The strongest, well-equipped military means nothing without an energy source to run it. One only has to look back in history to World War II to see what happened to a strong army when it ran out of petroleum and lucky for us they did. The same consequence can happen to a free and strong nation like the United States. Our economy can be brought to a halt by energy producing nations that once in control of our domestic markets raise the cost of energy to a prohibitive level. To prevent this we need to maintain a viable domestic oil and gas industry.

We hope you gentlemen will proceed with the utmost haste, energy and tenacity in the task you have taken to awake this nation of the impending peril to its national security and economy. You have the support of the domestic oil and gas industry.

The time has come for this country to draw the line and start fighting to keep our industries. We cannot continue to be a strong nation if we keep losing industries such as textile, steel, automobiles, uranium and copper to foreign competition subsidized by foreign governments.

The domestic oil and gas industry has historically preferred to operate in an open market free of government intervention. If given a choice it would prefer to do so; however, when foreign governments own the oil and gas reserves and control production in their countries, it is a fallacy to say we are competing business to business in a free market. We are competing business to governments in a government controlled market.

Senators, your proposed import fee on imported crude oil would be an important step in insuring the survival of the domestic oil and gas industry. We strongly feel foreign natural gas and refined petroleum products imported into this country should also be subject to an import fee and there should be no exemptions to the fees, such as heating oil. To impose a fee only on crude oil and not the other items mentioned would leave loopholes that would negate the purpose of the import fees. We need a strong natural gas market and adequate crude refining facilities in this nation if we are to maintain a viable oil and gas industry. We cannot afford to leave any loopholes or exemptions in proposed legislation for an import fee if it is to be effective.

Our fellow countrymen outside the energy producing states are naturally going to oppose legislation that in likelihood will raise energy costs. We can sympathize, but to be realistic they should be made to realize the following facts.

First, we are talking about a depleting source of energy, once used it cannot be replaced. It is a waste of our natural resource to consume it at a price below its value. In the last few years this country has achieved great strides in the conservational use of our oil and gas energy. Low, unrealistic energy prices tend to erode these good conservational practices. We need good conservation of our energy resources to insure they last for us, our children and grandchildren. A realistic cost of energy goes a long way to promote conservation. An import fee would help establish a realistic price level for domestic oil and gas.

Second, everyone in this nation has benefited from services provided by our government. We all share in the deficit our government has incurred providing these services and benefits. Therefore, we all have a responsibility to help reduce this tremendous deficit, not ignore it or pass it on to our grandchildren. Everyone in this nation uses some amount of energy, whether it be heating oil, gasoline, natural gas heating or any of the other numerous products and by-products refined or manufactured from crude oil and natural gas. An import fee imposed on imported foreign crude oil, natural gas and refined products would afford everyone in the United States an opportunity to participate in reducing and maybe even abolishing our national deficit.

Third, for national security, this nation cannot afford to be reliant upon foreign sources for energy. It makes no sense to have a strong army, navy and air force for defense of our nation if we do not have fuel for them to operate. A viable domestic oil and gas industry would insure that we would not be dependent upon an unreliable foreign source for our energy in the event of an armed threat to our national security.

Fourth, for the well-being of our national economy and to insure steady growth in all segments of business there needs to be stability in the price of oil and gas.

Wild fluctuations in the price of oil and gas such as have occurred during the past fourteen months, although offering short term relief in the price of gasoline, tend to be more detrimental in the long term. I will not reiterate all the facets of these detriments as they were covered very well by other testimony already given by witnesses representing various aspects of business. The consensus is an import fee will help instill stability in the oil and gas markets.

There is one segment of business from which I feel further testimony should be heard. This segment comprises investors, who through their confidence in the industry and their money fund independent oil and gas drilling, development and production. They are the ones who risk the necessary capital to find and produce new reserves in this country. Independent operators, financed by investors, find and produce eighty percent of the oil and gas in this country. Surprising as it may be to some, the majority of investors are not wealthy, scheming aristocrats. They are average working Americans who risk their earnings and savings by investment in the oil and gas industry. Their willingness to risk their hard earned money benefits us all. Their importance to the oil and gas industry cannot be overlooked. The oil and gas industry, like many other industries, needs financing, and investors supply a large amount of this.

The investor segment of the oil and gas industry is being devastated by the influx of low priced foreign crude oil and gas the same as all other segments of the industry. Investor confidence in the oil and gas industry has degenerated greatly over the past fourteen months to the point investment funds for drilling and development of oil and gas prospects are practically nonexistent.

When an oil and gas prospect is presented to an investor and assuming he accepts because he thinks the return will justify the risk of his capital, there will be at least a year or more of lag time for drilling and development before production produces him a revenue return on his investment. This is of course assuming you do not drill a dry hole and lose the entire investment. Approximately forty percent of all oil and gas wells drilled in this country are dry holes and nonproductive. Because of this lag time investors need stability in the oil and gas market. In order for them to intelligently evaluate a prospect they need reliance the market will not tumble once they have put up their money on a commitment. Investors that made a decision to invest in drilling programs twelve months ago or more did so because in our case oil prices were above twenty-five dollars a barrel and the price of casinghead gas was three dollars and sixty-eight cents per MCF. During the period from February 1986, the price of oil dropped as low as nine dollars per barrel and casinghead gas to one dollar twenty cents and some to seventy-four cents per MCF. With a drop in price of 278% to 497%, the return on an investment is devastated. At these prices, it does not take a genius to see those investors are not going to invest in the oil and gas business again. This is a sad fact the oil and gas industry and our nation is going to find out when the time comes to start drilling again. Without investor confidence, there will not be investor capital available. Keep in mind the rate of return on investment will proportionately determine the amount of available capital, the greater the return — the greater the amount.

I have included in this report comments from some of our investors. I think they are representative of the majority of oil and gas investors.

The following are our recommendations to maintain investor confidence in the domestic oil and gas industry, thus insuring the availability of adequate capital to fund continued drilling, development and production.

The passage of an import fee by the United States Government on imported crude oil and natural gas that would establish a stabilization of domestic prices not to fall below a price of twenty-four dollars per barrel for domestic crude oil and three dollars fifty cents per MCF for domestic gas. At these price levels an investor could assume he would receive somewhere around a twenty-five percent return on his investment. This would be a fair and acceptable return considering the risk involved by the investor and would probably not raise the price of gasoline more than an estimated thirty-eight cents per gallon over the current price and natural gas no more than it was at the burner tip fourteen months ago. The burner tip cost of gas to the consumer has not dropped that much.

The passage of an import fee for refined petroleum products in proportion to that on imported crude oil. An import fee on refined crude products is needed in order to prevent OPEC from switching imports of crude oil to refined products. It would also help maintain domestic refining capabilities, thus insuring a domestic market for domestic crude oil.

There should be no exemptions, such as heating oil from the import fees. Any exemptions would only allow new avenues for import by foreign countries and would weaken the intent and purpose of imposing import fees.

The Fuel Use Act should be repealed. Its purpose to restrict the use of natural gas in the 1970's is no longer needed. It was a bandaid remedy applied when the country mistakably thought it was running out of gas. Since its passage, an increased drilling activity created by an increase in price from a regulated price of seventy-nine cents per MCF to an allowed three dollars and fifty cents to six dollars per MCF for new and hard to produce gas has produced enough gas reserves that we now have an oversupply of natural gas. There is a lesson in this: when the price of gas and oil is sufficient to return a profit on the cost of exploration, drilling and development, there will be domestic oil and gas found. Natural gas is the cleanest and safest fuel source in this nation; its use should be encourage, not restricted.

FERC Rules 380, 436 and 451 regarding the abandonment of long-term contract, transmission and marketing of gas should be reviewed and reconsidered. It appears that although their intent was good, they have in fact created havoc with pipelines and producers alike. They have contributed to a wellhead price for gas that is non-productive for producers and not benefited the consumer either. They have placed the producer, who does not possess marketing capabilities or the resources to construct new pipelines, in competition with existing pipelines for the same customers. These customers already had long-term purchase contracts with the pipelines to use gas the pipelines were purchasing from the producer. This is like bidding with your right hand and then lowering the bid with your left hand. At the same time they have placed pipeline companies in the position of having to furnish access of their pipelines for spot market gas competition, which is eroding the market the pipelines had established for their producers, thus putting the pipeline companies in the position of taking less gas and paying less for the gas they do take from their long-term producers. As a result of these FERC Rules, independent producers are faced with a decision: They can honor their long-term contract with a pipeline company and continue to deliver less amounts of gas at a price which does not return a profit to them and their investors; or, abort the contract and enter into a spot market for which they do not have marketing expertise and resources and still receive a price for their gas that does not pay the cost of drilling, development and production. Abortion of long-term contracts by the producer can result in a law suit by the pipeline company. Also, there is risk of an antitrust suit for price fixing against producers when they group enough gas together to submit a bid for spot market gas. There was more stability in the gas market prior to FERC intervention when producers concentrated on production and pipeline companies transmitted and marketed gas. These problems must be resolved for a profitable price stability to return to the gas market and instill investor confidence in that market.

Other factors that would contribute to investor confidence in the domestic oil and gas industry would be repeal of the Windfall Profits Tax, a change in the depletion allowance from the present percentage to twenty-seven percent and a revision to the Internal Revenue Tax Code to exempt intangible drilling expenses from provisions of the alternative minimum income tax and a return of the investment tax credit on new wells drilled.

The foregoing testimony and following attachments are respectfully submitted this 16th day of March, 1987, for inclusion into the record of the Oil and Gas Field Hearings, Hobbs, New Mexico, February 28, 1987, and Farmington, New Mexico, March 2, 1987, chaired by Senator Jeff Bingaman, United States Senate Energy and Natural Resources Committee.

Respectfully,

James B. Ramsey

James B. Ramsey
President
New Tex, Ltd., Oil - Gas
Route 5, Box 300
Los Lunas, New Mexico 87031

JBR/vb

Attachments: Pages 6 thru 21

Copies: U. S. Senator Pete V. Domenici
U. S. Representative Joe Skeen
U. S. Representative Bill Richardson
U. S. Representative Manuel Lujan

INVESTOR SURVEY

NAME: BILL ALLEN DATE: 3/7/87

ADDRESS: 5377 S. LEWISTON ST.
AURORA COLORADO 80015

OCCUPATION: SALES

1. Are you at present an investor in the oil and gas industry? YES X, NO___.

2. What were your reasons for investing in the oil and gas industry?
   a) supplement retirement
   b) increase return on savings
   [✓ c)] other: [illegible]

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES X, NO___.
   Comment:

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES X, NO___.
   Comment:

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES X, NO___.
   Comment:

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES X, NO___.
   Comment:

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   a) adverse but recoverable
   [✓ b)] not recoverable
   c) devastating
   Comments:

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES___, NO X.
   Comment:

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES___, NO X.
Comment: They must stabilize at a price that makes it [illegible] profitable.

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $16 to $20
[✓ b)] $20 to $24
c) $24 to $28
d) Above $28
Comment:

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $1.75 to $2.50
b) $2.50 to $3.25
c) $3.25 to $4.00
d) Above $4.00
Comment:

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? YES X, NO___.
Comment

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? YES ✓, NO___.
Comment:

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES___, NO X.
Comment:

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? YES ✓, NO___.
Comment:

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?
a) Windfall Profits Tax YES___, NO___
b) Fuel Use Act YES___, NO___
c) FERC Orders 380, 436, 451 YES___, NO___
Comment:

Signature

INVESTOR SURVEY

NAME: Lester C Harris DATE: 3-9-87

ADDRESS: Box 5542
Albuquerque, N.M.

OCCUPATION: Electronics Technician

1. Are you at present an investor in the oil and gas industry? YES ✓, NO__.

2. What were your reasons for investing in the oil and gas industry?
   [✓ a)] supplement retirement
   b) increase return on savings
   c) other: __________

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES ✓, NO__.
   Comment: I would never invest again. I'm loosing money instead of making money.

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES ✓, NO__.
   Comment:

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES ✓, NO__.
   Comment:

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES ✓, NO__.
   Comment:

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   a) adverse but recoverable
   b) not recoverable
   [✓ c)] devastating
   Comments: I would only recover a small portion of my initial Investment. A very large amount would be lost.

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES__, NO ✓.
   Comment:

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES ✓, NO____.
Comment:

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $16 to $20 [✓ b)] $20 to $24
c) $24 to $28 d) Above $28
Comment:

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $1.75 to $2.50 b) $2.50 to $3.25
[✓ c)] $3.25 to $4.00 d) Above $4.00
Comment:

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? YES ✓, NO____.
Comment

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? YES ✓, NO____.
Comment:

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES____, NO ✓.
Comment:

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? YES ✓, NO____.
Comment:

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?
a) Windfall Profits Tax YES ✓, NO____
b) Fuel Use Act YES ✓, NO____
c) FERC Orders 380, 436, 451 YES ✓, NO____
Comment: The fuel use act is obsolete and Certainly needs To be repealed. The FERC Orders have Put The Gas Market in Shamble.

Lester C. Harris
Signature

INVESTOR SURVEY

NAME: A. B. Keith DATE: 3/9/87

ADDRESS: 4401 Kellia Ln. NE
Albuquerque, NM 87111

OCCUPATION: Engineer

1. Are you at present an investor in the oil and gas industry? YES ✓, NO___.

2. What were your reasons for investing in the oil and gas industry?
   a) supplement retirement
   [✓ b)] increase return on savings
   c) other: ______________________

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES ✓, NO___.
   Comment:

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES ✓, NO___.
   Comment:

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES ✓, NO___.
   Comment:

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES ✓, NO___.
   Comment:

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   a) adverse but recoverable
   b) not recoverable
   [✓ c)] devastating
   Comments:

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES___, NO ✓.
   Comment:

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES ✓, NO____.
Comment:

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $16 to $20 b) [✓ $20 to $24]
c) $24 to $28 d) Above $28
Comment:

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $1.75 to $2.50 [✓ b)] $2.50 to $3.25
c) $3.25 to $4.00 d) Above $4.00
Comment:

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? YES ✓, NO____.
Comment

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? YES ✓, NO____.
Comment:

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES____, NO ✓.
Comment:

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? YES ✓, NO____.
Comment:

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?
a) Windfall Profits Tax YES ✓, NO____
b) Fuel Use Act YES____, NO____
c) FERC Orders 380, 436, 451 YES____, NO____
Comment:

Don't know
about these.

AB Keith
Signature

INVESTOR SURVEY

NAME: Thomas R. Lindsey

DATE: March 12, 1987

ADDRESS: 2400 Louisiana Blvd NE #3
Albuquerque, NM 87110

OCCUPATION: NCR Corp Sales Manager

1. Are you at present an investor in the oil and gas industry? YES ✓, NO___.

2. What were your reasons for investing in the oil and gas industry?
   a) supplement retirement
   b) increase return on savings
   [✓ c)] other: Create additional income source

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES ✓, NO___.
   Comment:

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES ✓, NO___.
   Comment:

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES ✓, NO___.
   Comment:

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES ✓, NO___.
   Comment:

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   a) adverse but recoverable
   b) not recoverable
   [✓ c)] devastating
   Comments:

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES___, NO ✓.
   Comment:

Attachment Page 12

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES____, [✓ NO____].
Comment:

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $16 to $20 [✓ b)] $20 to $24
c) $24 to $28 d) Above $28
Comment:

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $1.75 to $2.50 [✓ b)] $2.50 to $3.25
c) $3.25 to $4.00 d) Above $4.00
Comment:

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? [✓ YES____], NO____.
Comment

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? [✓ YES____], NO____.
Comment:

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES____, [✓ NO____].
Comment:

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? [✓ YES____], NO____.
Comment:

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?
a) Windfall Profits Tax [✓ YES____], NO____
b) Fuel Use Act [✓ YES____], NO____
c) FERC Orders 380, 436, 451 [✓ YES____], NO____
Comment:

____
Signature

INVESTOR SURVEY

NAME: Dr & Mrs Chas G Nace DATE: 3/7/87

ADDRESS: 914 Sunset Dr NW
Socorro, N Mex 87801

OCCUPATION: Veterinarian

1. Are you at present an investor in the oil and gas industry? YES ✓, NO___.

2. What were your reasons for investing in the oil and gas industry?
   [✓ a)] supplement retirement
   [✓ b)] increase return on savings
   c) other: ____________________

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES ✓, NO___.
   Comment:

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES ✓, NO___.
   Comment:

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES ✓, NO___.
   Comment: Plus interference of Politics & State/Federal over regulation.

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES ✓, NO___.
   Comment: Same as #5

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   a) adverse but recoverable
   b) not recoverable
   [✓ c)] devastating
   Comments:

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES___, NO ✓.
   Comment:

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES ✓, NO____.
Comment: Stabilization but Not fixed Pricing

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?

a) $16 to $20	[✓ b)] $20 to $24
c) $24 to $28	d) Above $28

Comment:

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?

a) $1.75 to $2.50	b) $2.50 to $3.25
[✓ c)] $3.25 to $4.00	d) Above $4.00

Comment:

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? YES ✓, NO____.
Comment

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? YES ✓, NO____.
Comment:

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES____, NO ✓.
Comment: Possibly variations for different products but no exemptions. The more "crude" the import the less the fee.

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? YES ✓, NO____.
Comment: If not devoured by our politicans before it gets to that point

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?

a) Windfall Profits Tax	YES____,	NO____
b) Fuel Use Act	YES____,	NO____
c) FERC Orders 380, 436, 451	YES____,	NO____

Comment: Not well enough informed to comment

Chas. G. Nace, DVM
Signature
Gwen E. Nace

INVESTOR SURVEY

NAME: C.A. Rohne DATE: 3-6-87

ADDRESS: Box 348
Truth or Consequences NM 87901

OCCUPATION: BANKER

1. Are you at present an investor in the oil and gas industry? YES X, NO ___.

2. What were your reasons for investing in the oil and gas industry?
   - [✓ a) supplement retirement]
   - b) increase return on savings
   - c) other: ___

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES X, NO ___.
   Comment:

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES X, NO ___.
   Comment:

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES X, NO ___.
   Comment:

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES X, NO ___.
   Comment: They are regulating our prices, not the USA.

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   - a) adverse but recoverable
   - b) not recoverable
   - [✓ c) devastating]

   Comments:

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES ___, NO X.
   Comment: LOST CONFIDENCE due TO GOV'T INACTION.

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES____, NO____.
Comment: A LITTLE, but not much

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $16 to $20 [✓ b) $20 to $24]
c) $24 to $28 d) Above $28
Comment:

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $1.75 to $2.50 [✓ b) $2.50 to $3.25]
c) $3.25 to $4.00 d) Above $4.00
Comment: around $2.60 would be a good price, otherwise over $3.00 Inflation is poking her head up again.

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? YES____, NO____.
Comment I would say if the price was below $20.00 per barrel, then an import fee based on $1.00 per $1.00 below that ($20.00)

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? YES X , NO____.
Comment: maintain a certain price level. when the price drops below the price. the impose a $1.00 or whatever the price is below the stabilized

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES____, NO X .
Comment: Because the countries would switch to that category.

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? YES____, NO X .
Comment: The Gov't would just spend it somewhere else.

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?
a) Windfall Profits Tax YES____, NO X
b) Fuel Use Act YES____, NO X
c) FERC Orders 380, 436, 451 YES____, NO____
Comment: I don't know

C A Palm
Signature

INVESTOR SURVEY

NAME: RANDALL J SCHMILLE DATE: 3/11/87

ADDRESS: 8013 EDITH NE.
ALBUQUERQUE, NM 87113

OCCUPATION: CONTRACTOR

1. Are you at present an investor in the oil and gas industry? YES ✓, NO___.

2. What were your reasons for investing in the oil and gas industry?
   a) supplement retirement
   [✓ b)] increase return on savings
   c) other: ____________________

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES ✓, NO___.
   Comment: I wish I would have never been involved.

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES ✓, NO___.
   Comment:

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES ✓, NO___.
   Comment:

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES ✓, NO___.
   Comment:

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   a) adverse but recoverable
   b) not recoverable
   [✓ c)] devastating
   Comments: I will probably have to sell my house and use the equity to pay off the notes I owe.

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES___, NO ✓.
   Comment:
   Would you?

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES____, NO_✓_.
Comment: I'll only get burned once!

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $16 to $20 b) $20 to $24
c) $24 to $28 [✓ d) Above $28]
Comment:

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $1.75 to $2.50 b) $2.50 to $3.25
[✓ c) $3.25 to $4.00] d) Above $4.00
Comment:

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? YES_X_, NO____.
Comment

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? YES_X_, NO____.
Comment:

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES____, NO_X_.
Comment:

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? YES_✓_, NO____.
Comment:

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?
a) Windfall Profits Tax YES____, NO____
b) Fuel Use Act YES____, NO____
c) FERC Orders 380, 436, 451 YES____, NO____
Comment:

Signature

INVESTOR SURVEY

NAME: John H And DKay Wheatley DATE: 3/5/87

ADDRESS: 1117 Monte Largo, NE
Albuquerque, NM 87123

OCCUPATION: Engineer / Realtor

1. Are you at present an investor in the oil and gas industry? YES X, NO___.

2. What were your reasons for investing in the oil and gas industry?
   [✓ a)] supplement retirement
   [✓ b)] increase return on savings
   c) other: ______________________________

3. Has the recent fluctuation of oil and gas prices affected your confidence in the oil and gas industry as an investment vehicle? YES X, NO___.
   Comment: At current rates, oil and gas is not suitable as an investment.

4. Do you think over production by Mid-East Countries such as Saudi Arabia has contributed to low domestic crude prices? YES X, NO___.
   Comment: These major oil producing countries control oil prices.

5. Do you think the 164% increase of OPEC imports into this country is contributing to the demise of the domestic oil and gas industry? YES X, NO___.
   Comment: Increases in imports during a flat or declining market directly subtract from domestic production.

6. Do you think Canadian and Mexican gas imports into this country has contributed to the turmoil and demise of domestic gas markets? YES X, NO___.
   Comment:

7. If OPEC continues to increase imports of low price crude into the United States and Canada continues to increase its share of the domestic gas market to the point the wells you have invested in can no longer be produced economically and are forced to be plugged and abandoned, leaving unretrieved reserves in the ground that will never be recovered, what would be the effect on your investment?
   a) adverse but recoverable
   b) not recoverable
   c) devastating
   Comments: The effect on our investments would be essentially total loss. It is not possible at this time to determine whether that loss would be not recoverable or devastating.

8. If the above were to happen, would you ever invest in the oil and gas industry again? YES___, NO X.
   Comment: It would be difficult to invest following bankruptcy

9. Would stabilization of oil and gas prices return your confidence in the oil and gas industry as a place for investment? YES X, NO___.
Comment: If stabilization occurs at a reasonable price level.

10. At what level of price per barrel of oil do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $16 to $20 [✓ b)] $20 to $24 Minimum
[✓ c)] $24 to $28 Rapid for investors d) Above $28
Comment: Present investments were made at about this level ($20-28) or above and investment costs were high.

11. At what level of price per MCF of gas do you consider necessary to insure a viable industry with an acceptable return on your investment and not increase inflation to an untolerable level?
a) $1.75 to $2.50 b) $2.50 to $3.25
[✓ c)] $3.25 to $4.00 d) Above $4.00
Comment: Same as question 10

12. Do you favor an Import Fee on imported crude to help stabilize the price of oil and gas? YES ✓, NO___.
Comment That appears to be the only way to compete with the government controlled middle east production.

13. Do you also think an Import Fee on imported gas from Canada and Mexico would help stabilize the price of gas? YES X, NO___.
Comment: These countries are our friends - but they are still taking our money!

14. Do you think there should be any exemptions such as heating oil, refined petroleum products, etc. from an Import Fee? YES___, NO X.
Comment: Only if required to negotiate passage in congress.

15. Do you think revenues received from an Import Fee on imported crude oil, gas and refined crude oil products if applied to reduce the national deficit would benefit the nation as a whole? YES X, NO___.
Comment:

16. Do you think repeal of the following would help stabilize the oil and gas industry and benefit the nation as well?
a) Windfall Profits Tax YES X, NO___
b) Fuel Use Act YES X, NO___
c) FERC Orders 380, 436, 451 YES X, NO___
Comment: Windfall Profits Tax is not significant to small producers with low production of oil.

John H. Wheatley & Kay Wheatley
Signature

PH 505-327-9801

MERRION OIL & GAS CORPORATION
610 REILLY AVE • P O BOX 840
FARMINGTON, NEW MEXICO 87499

March 30, 1987

oilgas
46355

Senator Jeff Bingaman
123 E. Marcy, Suite 207
Santa Fe, NM 87501

Re: United States Senate Energy and Natural Resources Committee Oversight Hearing: Farmington, New Mexico March 2, 1987

Dear Senator Bingaman:

During the United States Senate Energy and Natural Resources Committee Oversight Hearing in Farmington, New Mexico on March 2, 1987, Robert N. Harbour, Vice-President of El Paso Natural Gas Company, testified that El Paso Natural Gas Company has not engaged in discriminatory gas contracting and purchasing activities in favor of itself or its affiliated companies and against other producers of natural gas.

As the president of an independent oil and gas producing company, whose principal business activities are conducted in the San Juan Basin of Northwest New Mexico and which has had substantial dealings with El Paso Natural Gas Company with respect to its gas contracting and purchasing activities, I must express, on the record, my disagreement with Mr. Harbour's statement.

It has been my recent experience that El Paso Natural Gas Company does, in fact, discriminate in favor of itself or its affiliated companies and against other producers of natural gas. As an example, El Paso Natural Gas Company has refused to purchase volumes of natural gas capable of being produced from a common source of supply by non-affiliated producers while, at the same time, it purchases volumes of natural gas produced from that common source of supply from an affiliated company. By this kind of discriminatory purchasing conduct, El Paso Natural Gas Company enhances the ability of its affiliated companies to protect their correlative rights within a common source of supply, thereby providing to its affiliate companies a significant competitive advantage over other producers of natural gas in the common source of supply from whom El Paso Natural Gas Company will not purchase natural gas.

Although the pipeline-affiliate discrimination issue was not the primary focus of the oversight hearing, I do believe it is important to have the record reflect that natural gas producers in attendance at the hearing did not completely acquiesce in the statement made by Mr. Harbour. Therefore, I respectfully request that this letter be made a part of the record of the oversight hearing held in Farmington on March 2, 1987. In addition, I would be happy to discuss the pipeline-affiliate discrimination issue in more detail should you think it necessary.

Thank you for your consideration of my views and comments.

Yours very truly,

MERRION OIL & GAS CORPORATION

Gregory Merrion

J. Gregory Merrion
President

JGM/re
cc: Senator Pete Domenici
4239 Dirksen Senate Office Bldg.
Washington, D.C. 20510

Mr. Robert N. Harbour
Vice-President
El Paso Natural Gas Company
P.O. Box 1492
El Paso, TX 79978

RONALD J. GAUBERT & ASSOC., INC.
OIL & GAS ACCOUNTING SERVICES
CONSULTANT

P.O BOX 53152
LAFAYETTE, LA 70505

PHONE (318) 232-0751

February 5, 1987

Lafayette Chamber of Commerce
Attn: Mr. Gene Fortier
P. O. Drawer 51307
Lafayette, LA 70505

RE: Cost Analysis of Oil & Gas Production

Dear Gene:

Attached is a summary of approximately 50 Artifical Lifted Marginal Wells. It is very important to understand that when a price of $18 is thrown around that the small oil and gas producer does not receive all of the $18 for himself. He must pay transportation cost, royalty owners, severance tax before he is faced with his operating cost. As you can see a producer's actual revenue when he sells a barrel of oil is $10.80. After he pays his cost of operating the well of approximately $15.00 he is left with a loss of $5.00 per barrel on each barrel produced.

It is important to understand that debt retirement is not included in these figures. Based on the data presented an operator needs at least another $5 to break even and then at least another $5 per barrel for debt retirement and profit.

Losing marginal production in the U.S. would be a devastating blow to our National Energy Security, not to mention the impact on jobs, economy, housing, etc.

I tried to summarize this data in the shortest form possible for presentation purposes but would be glad to provide more detail if necessary.

I hope the Senate Energy Committee Hearings will help save the energy business. We are in a very critical time in history. The prospect of becoming more energy dependent on foreign nations is very frightening. The free market system does not work when the cards are stacked against you.

Thanks to you and many others like you, I see some light at the end of the tunnel. Let's hope our efforts are heard loud and clear in Washington, D.C.

Sincerely yours,

Ronald J. Gaubert

RJG/cjf

Pertinent Information for Marginal Wells (10-40 bbls. per day)

Income:	
Sales Price (per bbl)	$ 18.00
Less: Transportation	[.70]
Less: Severance Tax	[2.15]
Less: Royalty	[4.35]
Net to operator before Operating Cost	$ 10.80
Expenses:	
Lifting Cost	$[14.00]
Admin. Cost (10%)	[1.80]
Net Loss to operator	$[5.00]

Figures are based on historical basis of 50 Marginal Wells on Artifical Lift (Pump, Jet Pump, Gas Lift, etc.). These figures do not take into account debt reduction on these wells. The lower the production, the higher the cost. These figures represent averages.

We need a program whereby we can save our Marginal Production in the U.S. We need $5.00 to bring the operator to even and $5.00 profit to continue to produce these wells and pay off debt. The selling price of oil needs to be at least $26.28 to save these reserves. Once these wells are plugged and abandoned it will not be economical to redrill these wells at any price since the casing and integrity of the well bore is destroyed during the plugging and abandon process.

BAYOU OIL BLUE'S

© Ernie Sphar

I FEEL SO BAD I GOT A WORRIED MIND, ALOT OF MY FRIEND'S HAVE GONE
BANKRUPT THIS TIME, SINCE THEY LEFT THE OIL BEHIND ON BLUE BAYOU.
SAVING NICKELS, SAVING DIMES, YOU CAN SEE ME IN THE WELFARE LINE,
ALL BECAUSE NO ONE TOOK THE TIME TO SAVE THE OIL.

I'M LEAVING SOON CAUSE THERE'S NO BOOM IN THIS OLD TOWN, I'VE GOT
TO MOVE AWAY CAUSE I CAN'T MAKE IT PAY THIS TIME AROUND;

AND OUR GOVERNMENT DON'T PAY THE RENT OR BUY THE GROCERIES, AN IMPORT
TAX IS WHAT WE NEED MR. POLITICIAN PLEASE,
AN IMPORT TAX IS WHAT WE NEED MR. POLITICIAN PLEASE!!

ENERGY
SECURITY
POLICY

National Committee for a Variable Oil Import Fee

P.O. Box 1178, Minneapolis, MN 55440-9990

612/338-6731

Energy Security Policy Group is a single purpose organization formed to develop grass roots support for establishment of a national energy policy.

The objective of that policy is to assure energy security for America through maintenance of a viable domestic oil and gas industry as guardian against over-dependence on unreliable sources of foreign oil. The means to that end is enactment of an oil import fee to provide energy price stability and thus attract investment to the search for new oil and gas reserves.

Raymond Plank
Chairman

FOR MORE INFORMATION CONTACT:
Gene Trumble
Campaign Coordinator
Energy Security Policy
750 Baker Building
Minneapolis, Minnesota 55402
612-338-6727

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OIL QUOTES

What's being said about the oil situation

"America must never again be left dependent upon unreliable foreign sources of oil."

President Reagan

* * * * *

"We should not put up with economic terrorism any more than we would any other kind of terrorism."

Interior Secretary Hodel

* * * * *

"Unless we protect our energy sources in this country, we will be dependent again on foreign sources and will be subject to the whims of foreign pricing, while putting our national security at risk, as well."

Governor George Sinner (North Dakota)

* * * * *

"In the Name of Sanity, Tax Oil."

Headline on New York Times editorial
December 24, 1985

* * * * *

"We are never going to have an oil import fee unless all of us get together, mobilize all of our energy, and begin to educate people all across this country about the need for an oil import fee. I believe that people really will get involved, if those that understand it, those that are producers themselves, those that see what's happening, those that can talk first hand about the premature plugging of wells, the idling of rigs, what is going to happen to prices down the line if we shut down the domestic industry. When those people start to talk, those people with the knowledge and understanding, I think the rest of the American people will listen and I believe then, we will begin to get some political action.

That's not going to happen, if those that understand the problem remain silent and inactive."

Senator David Boren (Oklahoma)

* * * * *

"Extravagant claims for a dramatic resurgence of economic growth due to falling oil prices is without justification."

Congressional Research Service report, 1986

* * * * *

"The Golden Age of Arab oil was not in the seventies but will be in the nineties of this century."

Shiek Ahmed Zaki Yamani

* * * * *

"The Western world cannot live without Arab oil. We believe that by 1987 the strength of oil as a political weapon will return to what it was in 1973."

Shiek Ahmed Zaki Yamani--1984

* * * * *

"There is no question that the depressed conditions that exist in the petroleum industry will affect the long-term welfare of the nation. Until oil prices increase appreciably, U. S. exploration will remain stagnant, our dependence on imports will continue to increase, and our vulnerability to oil price shocks and possible oil shortages or stoppages will rise to an excessively dangerous level. All of this will seriously affect our strategic and national security as well as our economic stability."

National Petroleum Council, Advisory
Committee to the Secretary of Energy
October, 1986

* * * * *

"The United States needs to be drilling 100,000+ wells per year, using 3,000+ rigs, and spending $50-70 billion to find as much oil and gas as we use every year. To do this, prices have to be at least $25.00/barrel."

The Keplinger Companies,
International Energy Consultants

* * * * *

"Rising U. S. dependence on imported oil poses a renewed threat to the country's energy security and economic stability. U. S. oil imports are averaging over 5 million barrels a day -- the highest level since 1981 -- as lower prices have led to increases in overall consumption and decreases in domestic production. Unchecked, these trends could expose the United States to the risks of future price disruptions in the world oil market, triggered by events in the volatile Middle East.

"The price paid by the U. S. for imported oil in the world market does not reflect the true, or social, cost to the nation of dependence on insecure sources of supply; given this gap between social cost and market price, more oil is consumed in the U. S. than is optimal. In other words, there are market imperfections associated with U. S. oil imports, just as there are market imperfections associated with the pollution created from burning high-sulfur coal. Collectively, these market imperfections give risk to an 'oil import premium,' which reflects the additional amount that society should be willing to pay above the world price for imported oil.

"There are two sets of market imperfections that comprise the premium. One of these is the 'economic component' of the premium. Because the United States is such a large purchaser in the world oil market, the price paid for foreign oil is not independent of how much the country imports. In particular, the greater the volume imported, the higher the price, and vice versa. Importantly, this means that, within the U. S., a given increase in demand for oil imports leads to a higher price that all pre-existing importers must pay. Moreover, rising world oil prices adversely affect both our macroeconomic performance and trade balance. Yet, individual U. S. purchasers of foreign oil do not pay a price that fully reflects these costs.

"The 'security component' of the premium reflects costs that stem from sudden, unanticipated, and large changes (i.e., disruption), in the price of oil in the world market. The U. S. economy is vulnerable, in the event of an oil price run-up, to an increased transfer of wealth abroad and its attendant costs. This vulnerability is a direct function of the volume of oil imports prior to a disruption. Another element of the security component of the premium is a function of the importance of oil per se in the economy.

The greater the value share of oil in the economy at the time of a disruption and the greater the economy's inability to shift quickly away from oil in the face of a change in its price, the greater the macroeconomic costs from the price shock. It is well-known that these macroeconomic costs are substantial."

"Oil Tariff Policy in an Uncertain Market"
Energy and Environmental Policy Center,
John F. Kennedy School of Government
Harvard University, November 1986

* * * * *

ENERGY
SECURITY
POLICY

National Committee for a Variable Oil Import Fee

P.O. Box 1178, Minneapolis, MN 55440-9990
612/338-6731

To Those Interested In a Viable Domestic Petroleum Industry.

In recent months a number of oil company executives and concerned citizens have formed the Energy Security Policy Group. (ESP) Our objectives are to preserve the domestic petroleum industry as a source of energy security in the public interest - for national security, employment security, and in the interest of avoiding energy and price blackmail thrust upon the U.S. twice in the last decade. Chapters of ESP have been formed in Denver, Tulsa, Oklahoma City, Dallas, Houston, Lafayette, and Bismarck, North Dakota. More are planned.

It is our thesis that as imports of crude oil increase to a point and at a price below which the U.S. is unable to replace the reserves we consume, energy dependence and risk of price and supply blackmail increase proportionately. In the first seven months of 1986 imports increased from 27% to 42% of the petroleum we consume. Our drilling rig count, having fallen from a peak of 4500 in 1981 to 1900 by year end 1985, collapsed to below 700 in 1986, as oil prices fell from $25.50/barrel to $9.00 before recovering to a current $13.25 following the most recent Geneva OPEC meeting.

The oil price collapse has spread to natural gas and coal, as dumped residual fuel oil pressured these two energy sources. Contrary to the administration's expectations, cheaper oil neither reduced our trade imbalances nor contributed to economic growth. Escalating imports increased July's trade imbalance and unemployment in oil, related steel and real estate which were not matched as forecast by gains elsewhere in our economy. Cheaper money and the drop in the American dollar against the currencies of foreign nations have failed to offset the massive and spreading dislocations caused by the downward spiral of our nation's formerly largest direct and indirect employer, the U.S. oil and gas industry.

Several of our industry's major associations have held too long to the free market rhetoric of the administration. Their revulsion at government intercession in any form fails to offset the policies of other nations bent upon gaining market share by flooding the U.S. - the world's largest consumer of petroleum and related products. Instead the associations and a number of Congressman called for a picnic basket of hand outs:

tax breaks in the face of the most significant tax reform in decades. Well intended pressure for the abandonment of the windfall profits tax levied not on foreign price gouging, but rather upon the domestic industry has been mounted. However, when prices are down and profits become losses, income and windfall profits taxes are not paid. Bandaids while the patient is hemorrhaging - unable to contribute to the national interest - or meaningful lease rentals or royalty payments to withering agricultural states and landowners.

Some industry, congressional and administration spokesmen clamored for direct subsidies to marginal wells, known as "Stripper production" - wells producing 10 or less barrels daily.

And others clamored for increasing purchases of oil for the Strategic Petroleum Reserve, now holding a 31 day U.S. supply - even as the government was offsetting purchases for the SPR with below market sales of oil from its Naval Petroleum Reserve.

A policy and action void.

ESP and a growing number of informed citizens are well aware that this is the first administration since before World War II not to hold that domestic energy sources warrant public policy to preserve energy independence. The "moral equivalent of war" still rings in many ears.

ESP believes that there is a level of domestic production below which our reliance upon unstable nations, owning and selling oil into our markets, should not be permitted to price American capacity out of competitive existence. If, for example, we do not want imports to provide more than 60% of our consumption - or 50%, then models can be developed to indicate the price to assure the requisite level of domestic activity to provide adequate U.S. production. Yet since oil and gas require around 5 years turn around time, goals need to be set and attendant policies effected before our industry loses its capacity to respond, even over five years. Oil and gas are not like grain or cattle, the cycles of which can be reversed in one or two years.

For the oil and gas industry to be responsive to the public interest, two factors are essential, and most of the aforementioned "bandaids" become cute and misleading. A price level is required at which America's vast reserves can be accessed. And the price level, or floor, needs be adequate to permit long term capital availability and commitment.

Many outside our industry are unaware that while the U.S. today has approximately 27 billion barrels of productive reserves, nearly 100 billion more barrels of reserves in known reservoirs can be accessed by enhanced recovery techniques. However, tertiary recovery requires price levels approximating $22.00/barrel and again - about five years to develop.

Similarly, extensive reserves are available offshore as well as in deeper and more remote reservoirs. Today, however, our industry is unable to pursue its search with half the funds or explorationists at work several years ago.

Accordingly ESP is calling for a Variable Oil Import Fee, applied to the imports of all oil and products from all nations. If for example the determined floor price were $22.00 per barrel, and the initial world price $15.00, the U.S. Treasury would collect $7.00 per barrel. Were the price of crude landed in the U.S. $18.00. the fee would be $4.00. At $22.00, the fee would be lifted. And a great American industry would gradually return to work.

There has been much opposition to the fee, largely centering in the following areas:

1. We would be "rigging the free market." Answer: there is no free market, nor has there been for over 50 years. Only last month at Geneva, sovereign nations which have manipulated supplies to consuming nations with the expressed purpose of eliminating competition in the U.S., Canada, and England agreed to cut production by 3 to 4 million barrels daily. Futures prices advanced from under $10.00 to $16.00 (a 60% variance) in less than two weeks. Yet without deciding the U.S. industry is vital and requires stable, adequate prices to perform, Teheran this time led the charge to set prices by curbing production even as Saudi Arabia determined to take markets at lower prices last fall.

   There are more serious, but as yet unconfirmed charges. It is fact that for five years Saudi Arabia sought to absorb increased world production resulting from the economic stimulus of higher oil prices, by reducing their own crude oil production. Saudi Arabia reduced its daily crude liftings from a peak of 10.5 million barrels daily to 2 million barrels, and then announced a reversal of policy - they would "knock out" high cost production, as the world's swing producer, by flooding a relatively inelastic market. Prices would - and did indeed collapse. The U.S. administration applauded deflation, ignoring the trade off of the attendant collapse of the domestic oil and gas industry.

   But in the recent Geneva Opec conference, Opec watchers observed a power shift. Iran, tired of falling oil prices which lessened their ability to finance their war against Iraq, is reported to have filled the power vacuum. After a week of OPEC indecision, Iran is observed to have advised the world's two lowest cost producers, Saudi Arabia and Kuwait, they were tired of the pro Iraq strategy. They wanted supply quotas returned to October 1984 levels and a four million barrel daily cut of Opec production. Iraq, anxious to finance its own war effort, had refused to go along with quota reduction. Iran is reported to have insisted they would undertake militarily to limit Iraq's production - and to have advised Saudi Arabia of a choice. "Shape up - or face us next." Three days after the conference was to have adjourned, supply limitations were agreed to and futures market prices rose 60% over the next two weeks.

The above is private, unconfirmed intelligence. However, your congressmen or their associates, do have access to U.S. intelligence - which should rival that of private sources. Ask them.

In any event, one thing is clear. There's a new "kid on the block" - with 35 million people, a military machine, and a religious fervor which honors death versus life, for their cause. Is this where U.S. energy policy should be set? Americans were held hostage for 444 days by Iran. How long would the U.S. opt to have its energy supplies held hostage, absent domestic energy policy? For the 31 day supply of the Strategic Petroleum Reserve?

Or should we continue to bicker over special tax concessions and subsidies for marginal wells? Or 69.9¢ gasoline versus another 20-25¢ which could assure we did not have to send Americans to desert nations to access energy.

Possibly the above is part of the answer to why the administration may be again weighing the variable import fee as a means to domestic energy sufficiency.

We still are a democracy. Your concern and expressions thereof are part of the polling process every elected official heeds. They can use your help and a new set of priorities as "tax reform" and the November elections once behind us, provide a basis for new priorities. Meanwhile, a few hundred more domestic energy related companies, a few more banks, and many more undrilled wells will be unavailable to contribute to the public interest.

The U.S. understands the level of price essential to have an industry. Whenever the administration matches avowed concern with appropriate action, predatory pricing into the U.S. market ends. As Truman said, "The buck stops here."

2. Congressmen bemoan; "We'll never see a bill that doesn't do more damage than good, as you'd have to exempt our friends Canada, Mexico, England, Venezuela".

Answer: Canadian producers are writing in favor of a U.S. variable oil import fee, as well as one in Canada. They believe if the U.S. adopts a policy, other nations no longer have an excuse to disrupt our markets with cheaper supplies when the result flows cash to the U.S. Treasury. Last weekend Canadian papers reported rising interest in Canada's adoption of the fee as a means of preserving its industry.

Mexico? Price cutting has reduced both their volumes and prices. Debt default, credit renegotiation is in process, already wounded banks are being cajolled into advancing more credit to Mexico. These are current and future taxpayer costs, unfunded, but left to a future to which neither unhealthy oil and gas, steel or U.S. manufacturing can contribute. Push it under the rug - march on stage on a white horse when the crisis has deepened seems to be our public policy - or lack thereof.

England? England's Thatcher also looks the other way. At the same time her oil and gas revenues decline, she raises the subsidy to the National Coal Board to keep coal employment - a double whammy and cost: lost revenues and greater subsidy.

Japan? Friends recently visited Japan and found rising national concern. Short term lower cost imports could increase consumption while deferring commitment to the development of reserves available to Japan from promising areas of exploration.

Brazil? Brazil opted not to pass thru the cost of lower imports, but kept the widening margin to foster development of its own energy resources - in order to lessen future dependence. They did not elect to promulgate a conflict, as does present U.S. policy, of pitting consumers against producers, but made their choice on the basis of longer range objectives.

Venezuela? Despite its eroding financial position, Venezuela has embarked on the policy of acquiring interests in American refineries in order to move its crude oil at competitive prices. At last count, they had gained 350,000 barrels per day of U.S. market and were climbing.

Only in America has our government turned its back.

3. Congressmen have a well-tempered set of questions and views to shift responsibility from a reasoned approach to an excuse for inaction. "How should we know which way to vote when the Congressmen of Texas are equally divided on the issue? (Please see my letter to Senator Gramm and his own position statement.)

Or why should we act to counter the administration's "free market" pronouncements while your industry is divided?

These arguments shift the responsibility from elected representatives to constituents. It is not popular for Congressmen to oppose a popular administration on any topic, unless their polls indicate a safe harbor. Cherished committee appointments? Reelection? The political process is generally perceived as following - not leading, public opinion. Here again, a mission of ESP is understanding and communication of grass roots concern. Public debate and confrontation.

The most insidious problem those concerned with the U.S. energy future and the viability of companies which sink or swim based upon concern on the one hand, or apathy on the other, is divisiveness within our avowed spokesmen and their nominated association proxies. When handouts and placebos replace policy and commitment, then Solzhenitsyn's statement, "The U.S. has lost its civil courage" - becomes reality. We become sheep enroute to slaughter.

Into this scenario comes ESP - whose time and commitment are relevant.

The support and concerns of each of you who have expressed yourselves and to whom this letter is addressed represent democracy at work.

And we are making progress. There are signs of hope.

It is readily apparent that the American people are way ahead of many of their elected representatives. They do understand that while the world can presently supply more energy than the world needs, that situation is desperately temporary.

They do understand that prices will rise as soon as nations willing to accept $10.00 per barrel today while eliminating U.S. competiton, will prefer $40.00 per barrel and more when our dependency again leaves us at others' mercy.

They do understand that the U.S. has rejected the nuclear alternative for several decades. They have seen vast investment in solar, wind and wave power, grain alcohol, solid waste conversion, and even coal with acid rain, leaving oil and gas as our bridge fuel to the future, even as research directed at the world beyond oil, fades. Success? Conservation and the domestic industry's magnificent response, now being abandoned, stand out.

Apache shareowners, unit holders, royalty owners, and now members of Energy Security Policy, are combining dollars, letters to Congressmen, petitions, understanding and support into the kind of critical mass which the administration and Congressmen are beginning to hear. You can help.

"National security" begins to be heard again from the free market proponents. And, as a few knowledgeable, dedicated governors, think tanks and public officials also are heard, their message is clear - it is time to redouble our efforts.

We thank you for your continuing interest and support. Hopefully you will continue to add your voice, your interest, and where possible, your dollars of investment in behalf of an American industry vital to the public interest, which we believe important to both loyal investors and our country.

If these examples make sense to you, please use them in your correspondence. If the petitions make sense to you, please use the opportunity to advance the position with friends and acquaintances. If you can support the cause financially, please do so.

We have import duties on nuts, white wine and shingles. As Mack Wallace of the Texas Railroad Commission inquires, "Who among us ever stood in line to be rationed a shingle?"

Respectfully,

Raymond Plank

Raymond Plank
Chairman of the Board
Apache Corporation - Energy Security Policy Group

RP:skr

ENERGY SECURITY POLICY

- PROSPECTUS -

OBJECTIVE: Assist the President of the United States and Congress to establish an energy policy in the public interest under which the domestic petroleum industry can supply approximately 60 percent of the oil and petroleum products consumed in the U.S. market.

THE PROBLEM -- Current oil prices are well below replacement costs which the U.S. must address in terms of unemployment, failing loans and banks, liquidating industry infrastructure, and a 50 percent shrinkage of domestic exploration and production companies. Similar effects are being experienced by other oil-producing nations whose economies, debt structures and nominal living standards are hostage to fallen crude oil prices.

Representative of an industry being liquidated, the U.S. drilling rig count recently stood at 809, or about 18 percent of the peak 4,530 rigs operating in 1981, the last year in which the U.S. replaced its production. As of May 1986 our domestic industry is unable to service its debt, to preserve jobs of its professional employees or to conduct more than a fraction of the exploration, development drilling and enhanced recovery projects that are essential to preserve either a reserve base or level of production necessary to provide our nation with a dependable supply of energy.

THE MEANS 1. Set oil price target adequate to insure domestic production equivalent to 60 percent of domestic demand.

Presently the domestic industry is collapsing under petroleum prices which have fallen by 60 percent in six months. Both drilling budgets and industry employment, as well as the number of service companies available to meet industry needs, currently are below the levels at which our reserves and productive capacity can be preserved to meet appropriate levels of production 1 to 3 years in the future.

Natural gas, which previously sold at half the Btu content of oil, has come under increased pricing pressure from oil. Gas prices also have collapsed in the face of pending shortages in 1-3 years, depending on weather conditions and industrial usage.

As a result, our nation is faced with the near-term specter of inadequate gas to supply domestic requirements, coupled with a rapid return to an increasing dependence on imported oil -- undoubtedly at substantially higher prices to compensate for reduced revenues since 1981 when oil reached the $40 per barrel range.

THE MEANS 2. Establish a variable import fee equivalent to the price differential between all imported oil and petroleum products and a target price level adequate to assure appropriate domestic reserve and production replacement.

If, for example, the targeted price level were $24 per barrel, and the cost of landed imported oil $14, the U.S. would impose and collect a fee of $10 per barrel.

If the cost of imported oil were $20, the import fee would be $4 per barrel. At $24 per barrel or more, the import fee would disappear. In other words, the principles of the windfall profits tax would be applied in reverse.

A variable import fee states to the oil-exporting nations and the rest of the world, "As the world's largest consumer and your best potential customer, it is in our national interest that we remain the free world's largest oil producer. You may competitively access our market, not with predatory pricing, but at a price at which our domestic petroleum industry can also compete and contribute. If you elect to sell below our target price, your discount flows into the U.S. Treasury, and you do not destroy our domestic capacity and unilaterally set prices after you have destroyed our basis for energy independence."

Discussion: A viable domestic exploration and production industry has two requirements:

Adequate price levels to assure appropriate levels of activity, employment and investments.

Stable minimum pricing to assure the integrity of bank security and investment and employment, in contrast to current prices which have rendered the domestic petroleum industry inoperable in the public interest.

Discussion: The current price has reduced the activity and capacity of the U.S. petroleum industry to levels at which it cannot reliably serve the public interest.

Experts have testified that under today's prices, domestic oil production must be expected to decline by approximately 3 million barrels per day by 1990 -- or about 1/3 of current U.S. productive capacity -- as a result of the abandonment of low productivity wells and the depletion of existing reserves. Lower prices and modest increases in demand are expected to add 1 million barrels daily to U.S. demand by 1990.

ESTIMATED U.S. ENERGY NEEDS

(In Barrels Per Day)

	1985	1990
Consumption	15,700,000	16,700,000
Domestic Production	10,600,000	7,700,000
Shortfall	5,100,000	9,000,000
Percent Filled by Domestic Supplies	67.5%	46.1%
Percent Filled by Imports	32.5%	53.9%

Increased imports may be expected to be available only at sharply higher prices.

The U.S. Strategic Petroleum Reserve (S.P.R.) presently contains 502 million barrels. This is equivalent to 33 days of total current U.S. requirements, 84 days to replace imports under today's spread and 50 days under the forecast 1990 conditions. There are several problems associated with relying upon this resource to bridge U.S. emergency needs:

1. The U.S. has yet to determine the criteria under which the emergency would be recognized.

2. Even if a portion of the S.P.R. were used to offset dwindling U.S. production, it would not fill the gap between domestic supply and demand.

It is reasonable to assume that under no circumstances would U.S. policies envision the reduction of emergency supplies below 50 percent of present inventories. If 40 percent of 1990 demand were satisfied from half of present S.P.R. stocks, a 6.4 million barrel daily shortfall must be expected. The reserve would still meet only 39 days' requirements. To double the 250 million barrels, even at a price of $14 per barrel, would require an investment of $3.5 billion, exclusive of handling costs, or $31.5 billion to hedge one year's requirements.

Alternatively, how much more sensible it would be to:

1. Preserve 3 million barrels of daily U.S. productive capacity;
2. collect an import fee to the Treasury to compensate the U.S. for the social and economic costs incurred during periods when high-cost oil depressed the U.S. economy; and
3. avoid importing 4 million additional barrels a day at a cost to the U.S. (before any price increases) presently equal to $56 million daily, or $1.7 billion per month.

To date, resistance by the predominant industry associations to the variable import fee has been predicated upon two factors:

1. Removing the government from the energy business and allowing the industry to compete in a "free market."

   Oil and gas have not been "free markets" either domestically or on a world basis for 40 years. Some 80 percent of world oil production is owned and controlled by sovereign nation-states whose pricing policies are politically as well as economically motivated.

   At the same time, by Federal policy, the U.S. has largely rejected the nuclear alternative. Today just 14 percent of the total U.S. electrical power is generated by nuclear energy, compared to 50 percent in both France and Sweden. Similarly, the growing concerns about acid rain have combined with the current depressed oil and gas prices to effectively curtail development of coal as an alternate energy source. The U.S. public has a vital stake in Federal policies that both govern and determine the availability of energy to meet domestic needs.

2. Opponents to import controls contend that there is no point in trying to establish a variable import fee because it is politically infeasible.

   Says who? Not 78 percent of our industry who, in response to a current poll, believe otherwise and are not being heard. This defeatist attitude by some in the industry is contributing to Congressional confusion and Presidential inaction.

   A recent Wall Street Journal/NBC poll of American consumers revealed that 77 percent of the 2,239 respondents believe it is likely we are approaching another energy crisis; 53 percent favored a fee on imported oil, with only 36 percent opposing the idea.

   At the same time, industry associations which are now calling for a "hands off" policy by the Federal government were calling for a "hands on" policy when it came to a number of proposals that would provide subsidies for certain elements within our industry. None of the latter deal with stabilizing prices at a minimum level to preserve stripper production, attract essential exploration and development, and support research and enhanced recovery projects capable of yielding an additional estimated proven recoverable reserve of 150 billion barrels. Such proven but uneconomic reserves at $14 per barrel presently exceed proven productive reserves by a five-fold factor.

Means to achieve a variable import fee.

1. Communicate with the public to develop consumer and public understanding and support through sound research and emphasis on the public interest.

2. Mobilize industry and public support.

3. Persuade the President and the executive branch of government to acknowledge the need for an energy policy in the public interest and to satisfy that need promptly and effectively.

4. Persuade Congress to understand the urgent national need for action and adopt our program.

   Elected officials are responsive to a combination of sound persuasion and appeals from their constituents. They need to know that the action recommended is in the public interest and does not threaten their own political security.

   Long-term national interest is too often sacrificed to short-term political considerations. Our educational program and communication efforts need to recognize and address these realities.

The Program - Phase I

1. Recruit 1,000 (or more) oil and service company members as an informed nucleus for the effort.

   Recruit 5,000 (or more) additional members who believe our proposals satisfy a clear national need.

Obtain 1,000,000 signatures on petitions favoring our approach of a viable national energy policy in the public interest.

Raise $1,000,000 (or more) for research, public education and communication.

2. Establish regional organizations with staff and volunteers to conduct the following functions:

    2.1 Membership recruitment

    Speakers' bureau

    Fund-raising

    Communications

    Petition circulation

    Congressional and Executive Branch Contact

    Policy and governance

    2.2 Develop state leadership and committee delegates to coordinate activity within individual state organizations.

    2.3 Integrate the regional entities into a single-purpose national organization, with a national headquarters and representation in Washington. The organization will:

        2.3.1 Conduct and publicize research.

        2.3.2 Hold conferences and seminars supported by members from the national, regional and state levels.

Discussion: Most industry associations exist to represent their specific constituents on a variety of issues over indefinite time periods. Those goals frequently generate internal conflicts and pressures which prevent effective support of specific issues, such as a national energy policy based on a variable import fee.

These organizations often cannot provide the undivided attention and commitment needed to achieve major national goals. They can help, by providing logistical and educational support. They can hinder, by giving politicians the impression that the industry is hopelessly divided.

An organization with a single goal and a finite objective has but one measure of achievement -- to attain its objective within a given time frame. "Pass or fail."

Such an organization is not meant to compete with the trade associations and does not deserve their opposition when its objective -- a sound national energy policy implemented by a variable import fee -- is clearly in the national interest.

While success is our goal, the effort itself, based upon major, widespread commitment, must be heard and reckoned with at multiple levels. Its visibility and dedication will draw attention and understanding:

- Among the public,
- In Congress and the Executive branch of government, and
- Among the exporting nations which will have to reckon with a peaceful initiative directed at preserving a portion of our domestic oil and gas industry and its capacity to provide our nation with energy security.

Each industry member, employee and present or potential investor, each present or potential lender and every American who recognizes the need for an effective national energy policy is invited to join in advancing a purpose, the objectives of which are common to all; energy, industry, and employment security in the national interest.

Houma-Terrebonne Chamber of Commerce

1700 St Charles Street
(504) 876 5600

P O Box 328
Houma Louisiana 70361

February 5, 1987

The Honorable J. Bennett Johnston, Jr.
Chairman, Senate Energy & Natural Resources Committee
United States Senate
Washington, D. C. 20510

Dear Senator Johnston:

The Houma-Terrebonne Chamber of Commerce has studied the subject of a proposed variable rate oil import tariff which has the support of numerous members of the Louisiana Congressional Delegation. In addition, we have found that a growing number of major oil companies would support such a tariff under certain conditions.

Our Chamber has wrestled with its basic commitment to the free enterprise system; however, certain world trade conditions subject our businesses to unfair competition. These conditions warrant our reassessment of American free trade policies.

Single standards should prevail in international trade whereby American industries, strategic to the national security, would not be devastated by foreign competition which does not adhere to free trade principles. We believe that retaliatory action is not as likely as commonly feared because the United States has the leverage to remain in the driver's seat as long as we have the purchasing power and the world's largest market in which foreigners can sell their products. If we allow our basic industries to deteriorate, we would not only irrevocably damage our national security but we would relegate American labor to jobs which would diminish our per capita income. Hence, our purchasing power as a world market would in the long run be diminished and we would become a second class power commercially and militarily.

Concern over the negative effect of an oil import tariff, on United States manufacturing industries which are energy-intensive, disregards the long term disruptive effects of an unreliable supply of energy. It is true that increased costs, for fuel or anything else, will affect our competitive position in world markets. A high import fee, e. g., to sustain oil at $30.00 a barrel would be excessive. However, a minimal threshold could be devised which would help to stabilize the domestic industry, provide confidence to investors and allow renewed planning for exploration and drilling.

Again, an excessive tariff should be avoided as it would trigger the need to protect fuel oil consumers in the northeastern states; agricultural and other large users of feedstocks and products. An excessive threshold would also adversely affect friendly oil producing nations such as Canada, Mexico, Venezuela and Nigeria.

The present volatile pricing climate is legislated by OPEC. We are of the opinion that this is not a free market condition. If anyone is going to legislate the price of oil entering our country then it should be the U. S. Congress who is held accountable to the American people.

We encourage the adoption of a variable rate import tariff, that would provide constancy in pricing, keyed to the minimal incentives required to assure the preservation of our domestic oil industry.

For additional background information, we recommend your review of a statement by Texaco submitted on June 6, 1986 to the Subcommittee on Panama Canal and Outer Continental Shelf Committee on Merchant Marine and Fisheries, United States House of Representatives. Similar testimony on the high cost of low-priced oil by Fred L. Hartley, Chairman and Chief Executive Officer, Unocal Corporation, is worthy of your review. Other major companies have expressed equal concern.

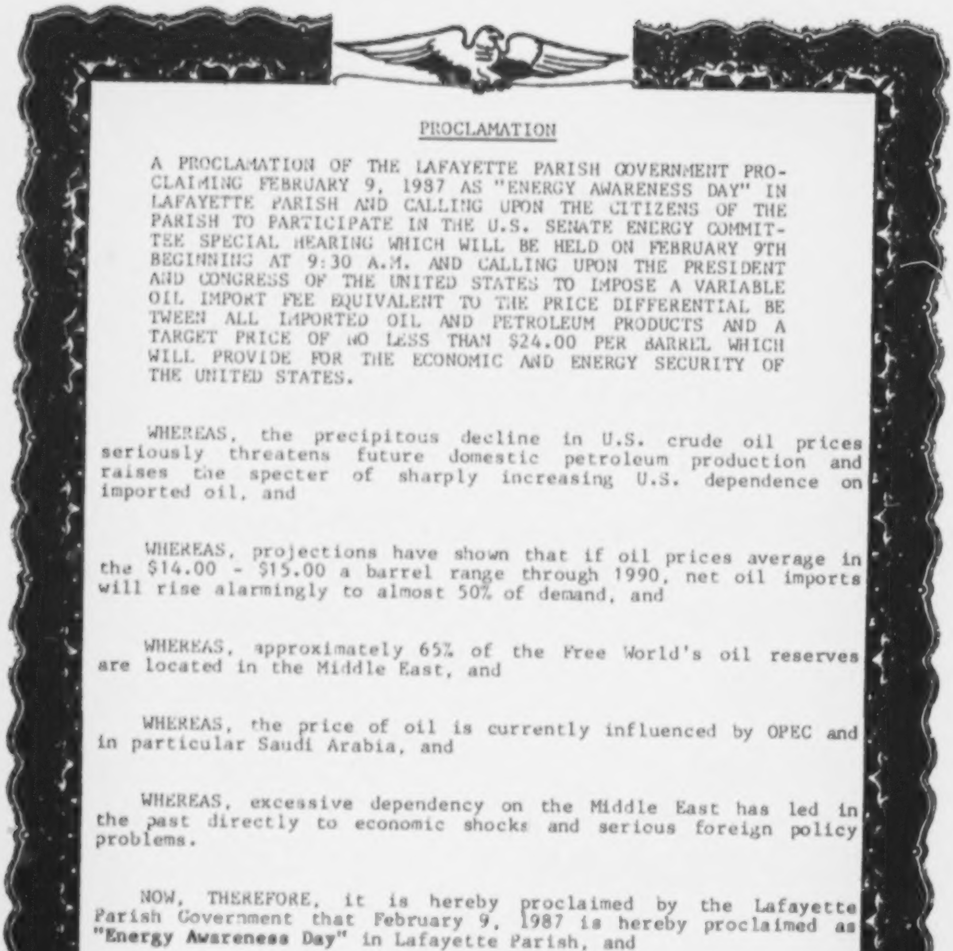
Thank you for allowing us to present this position paper.

Sincerely,

Arthur A. DeFraites Jr.

Arthur A. DeFraites, Jr.
President

AAFjr/mb



PROCLAMATION

A PROCLAMATION OF THE LAFAYETTE PARISH GOVERNMENT PROCLAIMING FEBRUARY 9, 1987 AS "ENERGY AWARENESS DAY" IN LAFAYETTE PARISH AND CALLING UPON THE CITIZENS OF THE PARISH TO PARTICIPATE IN THE U.S. SENATE ENERGY COMMITTEE SPECIAL HEARING WHICH WILL BE HELD ON FEBRUARY 9TH BEGINNING AT 9:30 A.M. AND CALLING UPON THE PRESIDENT AND CONGRESS OF THE UNITED STATES TO IMPOSE A VARIABLE OIL IMPORT FEE EQUIVALENT TO THE PRICE DIFFERENTIAL BETWEEN ALL IMPORTED OIL AND PETROLEUM PRODUCTS AND A TARGET PRICE OF NO LESS THAN $24.00 PER BARREL WHICH WILL PROVIDE FOR THE ECONOMIC AND ENERGY SECURITY OF THE UNITED STATES.

WHEREAS, the precipitous decline in U.S. crude oil prices seriously threatens future domestic petroleum production and raises the specter of sharply increasing U.S. dependence on imported oil, and

WHEREAS, projections have shown that if oil prices average in the $14.00 - $15.00 a barrel range through 1990, net oil imports will rise alarmingly to almost 50% of demand, and

WHEREAS, approximately 65% of the Free World's oil reserves are located in the Middle East, and

WHEREAS, the price of oil is currently influenced by OPEC and in particular Saudi Arabia, and

WHEREAS, excessive dependency on the Middle East has led in the past directly to economic shocks and serious foreign policy problems.

NOW, THEREFORE, it is hereby proclaimed by the Lafayette Parish Government that February 9, 1987 is hereby proclaimed as **"Energy Awareness Day"** in Lafayette Parish, and

SECTION 1: That the Lafayette Parish Council and the Parish President hereby call upon the President and Congress of the United States to impose a variable import fee equivalent to the price differential between all imported oil and petroleum products and a target price level of not less than $24.00 per barrel which will provide for the economic and energy security of the United States.

SECTION 2: All revenues received into the general fund of the Treasury of the U.S. that are attributable to the variable import fee shall be used to reduce the deficit in the budget of the Federal Government.

SECTION 3: The citizens of Lafayette Parish are urged to assemble in the Cajundome on February 9, 1987 to participate in this Special U. S. Senate Energy Committee Public Hearing in order to highlight this national problem which impacts the economic and energy security of the United States.

O.C. Guilliot, Jr.

O. C. GUILLIOT, JR.
CHAIR

WALTER S. COMEAUX, JR.
PARISH PRESIDENT

February 9, 1987

MR. CHAIRMAN:

MY NAME IS CEDRIC S. LAFLEUR AND I AM THE DULY ELECTED MAYOR OF THE CITY OF MORGAN CITY, WHICH AS YOU KNOW IS LOCATED IN ST. MARY PARISH. THE DEPRESSION IN THE OFFSHORE OIL INDUSTRY HAS REACHED SUCH SERIOUS CIRCUMSTANCES THAT IT IS EXTREMELY IMPORTANT THAT THE FEDERAL GOVERNMENT INQUIRE INTO AND DISCOVER THE SERIOUS THREAT TO OUR NATIONAL SECURITY AND TO THE ECONOMIC VIABILITY OF SOUTH LOUISIANA.

THE DEVASTATION TO THE PETROLEUM INDUSTRY PARTICULARLY IN SOUTH LOUISIANA AND IN THE GULF OF MEXICO POSES A SERIOUS THREAT TO OUR COUNTRY'S INDEPENDENCE AS REGARDS NATIONAL PETROLEUM REQUIREMENTS AND PETROLEUM STOCKPILES SINCE THE COMPANIES THAT ARE ENGAGED IN OFFSHORE EXPLORATION, DRILLING, PRODUCTION, AND SERVICING HAVE FALLEN TO ECONOMIC RUIN AND BANKRUPTCY TO SUCH AN EXTENT THAT OUR CAPABILITIES TO RESPOND TO EMERGENCIES HAS BEEN VIRTUALLY ELIMINATED. FURTHER DECLINE COULD LEAVE THE SOUTHERN UNITED STATES WITH NO CAPACITY TO RESPOND TO NATIONAL SECURITY REQUIREMENTS OR TO THE ECONOMIC DEMANDS OF OUR COUNTRY.

CHEAP FOREIGN OIL HAS CAUSED A RECORD NUMBER OF BANKRUPTCIES OF MANY OF OUR LEADING OIL COMPANIES; WE HAVE AND SEE NO RELIEF TO AN UNEMPLOYMENT RATE OF 23%, A LOSS AND FLIGHT OF SKILLED EMPLOYEES TO OTHER PARTS OF THE COUNTRY, ALL SEEKING JOBS, WITH ALL OF THE USUAL DIFFICULTIES AND LOSS OF SERVICES BROUGHT ON BY ECONOMIC DECLINE. NOT ONLY HAS THE GENERAL ECNONMY SUFFERED, BUT GOVERNMENTS ARE STRUGGLING TO PROVIDE SERVICES TO ITS PEOPLE AND FAMILY LIFE AND THE GENERAL STANDARD OF LIVING FOR ALL OF OUR CITIZENS HAS BEEN SERIOUSLY DIMINISHED.

THE ENERGY COMMITTEE MUST TAKE POSITIVE AND VIGOROUS STEPS AND RECOMMEND SIGNIFICANT LEGISLATION TO ACCOMPLISH THE FOLLOWING AS A MINIMUM. (A) AN EFFECTIVE IMPORT TAX MUST BE IMPOSED ON ALL FOREIGN OILS AND LUBRICANTS BEING IMPORTED INTO THIS COUNTRY. IT IS ONLY THROUGH THIS MEANS THAT REASONABLE OIL PRICES FOR DOMESTIC OILS AND PETROLEUMS CAN BE ACHIEVED. (B) INCENTIVES FOR DOMESTIC OIL AND GAS EXPLORATION MUST BE AUTHORIZED TO INDUCE, PROMOTE, AND FACILITATE THE REGENERATION AND IN FACT REHABILITATION OF OUR OIL AND GAS

COMPANIES IN THE SOUTHERN UNITED STATES. (C) THE NATURAL GAS POLICY ACT OF 1978 MUST BE AMENDED TO PERMIT USE OF NATURAL GAS AS BOILER FUELS AND EXPAND USES OF NATURAL GAS FOR OTHER PURPOSES AS WAS FORMALLY AUTHORIZED. IT IS ONLY THROUGH THESE MEANS THAT FURTHER EXPLORATION AND DISCOVERY OF RESERVES OF NATURAL GAS WILL BE EFFECTED.

ALL OF US IN SOUTH LOUISIANA ARE DEPENDING AND LOOK TO THE ENERGY COMMITTEE FOR LEADERSHIP AT THE FEDERAL LEVEL TO ENACT NECESSARY LEGISLATION TO REVITALIZE OUR DOMESTIC OIL INDUSTRY WHICH WILL IN TURN PROMOTE OUR LOCAL ECONOMY AND PROVIDE FOR THE CONTINUED WELFARE OF OUR CITIZENS, OUR BUSINESSES, AND OUR GOVERNMENT. THE WELFARE OF BUSINESS AND MANY PEOPLE ARE DEPENDENT ON THE ACTIONS AND LEGISLATION YOU TAKE AS A RESULT OF YOUR INQUIRIES. WE KNOW WE CAN DEPEND ON YOU.

THANK YOU FOR YOUR CONSIDERATION IN THIS MATTER.

VERY TRULY YOURS,

CITY OF MORGAN CITY
Cedric S Lafleur
CEDRIC S. LAFLEUR
MAYOR

CSL:CAA

Frances Love ***and Associates***
PUBLICITY AND PUBLIC RELATIONS
CONSULTANTS
Town House Towers • Oil Center • P. O. Box 51998 • Lafayette, Louisiana 70505 • 1-318-233-1445

August 12, 1986

TO: A Cross Section of Oil Industry Leadership In La., Tx., and Ok.

RE: QUESTIONNAIRE ON THE STATUS OF THE OIL INDUSTRY TODAY.

Dear Sirs:

During the past several months we have been trying to find an effective way to communicate the severity of the oil industry's position (1) to the general public outside of Texas, Oklahoma, and Louisiana; and (2) to our national leadership in Washington D. C.

We all know that our national security is now in serious jeopardy unless the Energy situation is addressed realistically for a long range solution.

The attached questionnaire is our sincere effort to document the Energy Crisis for broad distribution. Please take some time to answer and return to us by Aug. 20, so that we can tabulate and send the summary to the following key offices, publications, and leadership by Sept. 1.

The White House, President Reagan
Dept. of the Interior, Donald Hodel, Secretary
Congressmen and Senators from 50 States
Oil Editors of Regional Newspapers
Business Editors of Metropolitan Newspapers Nationally
Leading Oil Publications

Also, API

Why do we care? Our family has been a part of the oil industry since 1948, and many of our clients of the past 20 years have represented the leadership in oil. We have worked with oil shows (Louisiana Gulf Coast Oil Exposition), oil service companies, the Lafayette Petroleum Club, and the Gulf Coast Oil Center Golf Association since 1965. Thru the years we have interviewed oil leadership throughout the region. Our files bulge with facts. We want to make this effort.

Sincerely,

Frances Love

Frances Love

August 17: Instead of Aug. 20 we are requesting Aug. 25 as the target date for us to have these questionnaires returned for counting. If you know of others in your city or other places whose input would be helpful, please feel free to make copies of this questionaire and letter to send to them. Thanks for your help.

8-24-86
Final Update 9-16-86

IN YOUR OPINION WHAT WILL IT TAKE TO REJUVENATE THE OIL INDUSTRY OF THE USA?

1. Where is your position? Length of time in industry?_____, Services________,
Owner_____, Geologist_____, Engineer_____, Landman_____ Production owner_____,
Royalty owner_____, Manager_____, Department Head_____, Geophysicist_____, Other (*) .

2. Do you trust OPEC to stabilize their production lower than current free world usage?
-No -65 Yes 14 11-don't know

3. Do you see enough encouragement for the oil industry to explore to increase our current reserves which are now decreasing faster than they are being replaced?_____
-No-54 Yes-6 ?-12

4. Will the oil industry fare any better under the proposed new tax set-up? _____
-NO-41 Yes-6 ?-15

5. Would an import fee help?______ Or do you think that it would be treated as more money for Congress to tax?
Yes-48 No-21 6?

6. Is your work dependent directly upon wells being drilled?_____
on preparation for drilling?__________
on development after drilling?_________

7. Do you think that with appropriate incentives the industry can build our reserves to the point of supplying USA needs without OPEC?______
3/4 of our needs?______
1/2 or less of our needs?_______

8. If you were offered another position outside of the oil business, at or near the same level of income as you had before the crash, would you stay in the oil industry?_____ Yes-57 15 No -25 Retired - 19

9. If you left the business and it got good again, would you consider returning to it?
______ Yes -19 No-24 ?-7 Maybe

10. Would you encourage your own children or other young high schoolers to major in degrees that would prepare them for the oil industry?______
Yes 20 No-58

11. Since many banks and other financial institutions have been severely hurt by the crash of the oil industry, do you think that Congress should encourage private capital to invest in this industry?______
Yes-51 No- 11 ?-13

12. Do you think that it would be productive for Congress to put the following kind of incentive program out for us to regain energy sufficiency for our national defense in order to reach a 30-40 year reserve?

(a) Total write-off of prospect acquisition, drilling costs, and intangibles in the year that they occur or are allocated Yes-56 No 14

(b) Restore depletion to 27½% or higher until the above level of reserves are reached Yes - 77

(c) Should this kind of program be maintained until another source of energy is developed to take its place? yes 61 No-5 NoAns - 12

13. Since a high percentage of the knowledgeable and experienced personnel in the seismic, geological, engineering, land and legal portions of the oil industry have been retired or laid off by companies paring down their operating costs, how many years do you think that it will require (even with full incentives) to become fully effective again?______________

(*) Pipeline______, Refining______, Other________.

2 QUESTIONNAIRE

14. Why do you think that the automobile, steel, and rubber industries (to name only three) have not lifted a hand to help the oil and gas industry, in view of the fact that their basic existence depends on energy products?
39-Comments - 48

15. Do you feel that the communication media (newspapers, TV, and radio) has been factual and impartial in reporting oil news? Yes — 15
No — 47

16. Do you feel that ignorance about the oil industry by the public and elected officials throughout our nation is because of lack of understanding by the media?
Yes - 48
No - 14

17. Do you think that elected officials of non-oil states "fan" hatred of the oil industry because it keeps them in office? Yes-42 No - 8

18. If our domestic oil industry is demolished, do you see gas prices at the pump going up or down? Yes 70 Down 2

19. Do you think that our national security is affected as we depend more on OPEC nations and other countries to supply our oil needs? Yes 51

20. In the cities and communities where you have lived and worked has the presence of oil industry people contributed to the economic and cultural progress of the community? yes - 49

21. Please give us your own comments. (You do not need to sign this letter. However, if you do sign, we will not directly quote you without your written permission.)
28 comments - 61 NC - 28

UNIVERSAL FABRICATORS INC.

February 6, 1987

U.S. Senate Energy Committee
Cajundome
Lafayette, LA

FACTS IN SUPPORT OF AN OIL IMPORT FEE

It's estimated that 75% of today's production in America will be used up by the end of this century. Even with the tremendous amount of drilling between 1972 and 1982, U.S. oil reserves dropped 3%. Currently, we are only drilling at 17% of that hectic pace.

America has only 4% of the proven reserves, but 90% of all the wells of the free world. The U.S. is by far the world's largest energy consumer, using nearly 17 million b/d or 30% of the world's total daily production.

The U.S. is on the verge of a national and economic security crisis. The crisis will continue until such time oil prices exceed $25 a barrel. U.S. natural gas reserves are declining rapidly, and will contract even further in 1987. About 73% of the combined offshore reserves of Louisiana and Texas found in 1984 will be totally produced by the end of 1989. Production from a typical Gulf of Mexico gas well is exhausted in 4 to 5 years.

The severe cutbacks by American oil companies due to plunging cash flows is laying the groundwork for an energy shortage worse than that of 1970's. The oil price collapse is setting the stage for another oil crisis far more severe than the ones following the 1973-74 Arab oil embargo and the 1979 Iranian revolution. The current lower oil prices likely will increase sluggish world petroleum demand, a sure formula for higher prices in the near future. There is no spare oil producing capacity outside OPEC.

We do not have an energy policy under the present administration. The recent increase in oil prices is not enough to reduce the likelihood that U.S. dependence on imports will continue to rise at alarming rates. Given the growing instability of the Persian Gulf region, it's quite possible that governments hostile to the U.S. could eventually come into power in most of the producing nations. This could increase the likelihood of actions to with-[illegible]il exports to the U.S. for purely political reasons.

PORT OF IBERIA

P.O. Box 1376 • New Iberia, Louisiana 70561-1376
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The Trade Expansion Act of 1962 gives the President the power to place a tax or quota on crude oil imports if a threat to national security exists. Current trends contain the potential for a future shortage that could compromise our economic and national security. The drilling and exploration industry is in danger of imminent collapse and with it will go America's hopes for energy self-sufficiency and protection against oil blackmail for foreign suppliers.

The tentative agreement reached by OPEC to establish minimum pricing of $18/bbl and to restrict oil production is only the first step in a long tortuous journey lined with pitfalls, only a federal tariff on petroleum imports to protect the domestic industry can provide a floor to justify a turnaround in domestic exploration and drilling. A national policy is needed to lessen U.S. dependence on the Middle East and encourage future energy growth for the betterment of all mankind.

The very threat of an oil import fee has the OPEC nations coming to terms for stable oil prices.

Failure to use import tariffs to create stability and preserve competition in the domestic oil and gas industry in the name of free trade is a policy designed to continue the enrichment of foreign powers, decrease our standard of living, reduce our global defense capabilities and restrict competition. Unless we do something to put a floor on the price of oil that makes the industry viable and realistic, we will not have a domestic industry.

To boost drilling, industry needs more economic incentives. Positive government energy policies that encourage, rather than discourage, domestic petroleum exploration and production is needed to lead the nation to more stable, secure energy reserves for the U.S. This can be accomplished by removing tax disincentives and use of positive incentives to maintain existing production and stimulate exploration development. Serious consideration should be given to eliminating the windfall profit tax and generally lowering the overall tax burden. The petroleum industry is the highest taxes in the nation. We should favor tax credits for domestic oil exploration and to keep marginal wells producing. Moreover, prices of all gas still under federal controls should be immediately deregulated. Also, we should support repeal of the Fuel Use Act.

The nation faces an enormous long term bill for any short term savings that might be realized through the present low oil pricing. The nation may find itself simply unable to meet its oil needs in the event it is required to bring its defense forces to a full mobilization. Although it's not commonly understood, direct investment in the oil and gas industry is a major driving force within the U.S. economy. From 20 to 30 percent of all capital investment is oil related.

In 1985, Louisiana had 25,823 producing oil wells and 14,436 producing natural gas wells. Crude oil production in Louisiana in 1985 totaled 508 million barrels while natural gas production totaled 5.1 trillion cubic feet, almost one-third of the nation's energy supply. Our waterways and our oil and gas industry have a long history of kinship.

Our domestic oil and gas industry produces 2.8 billion barrels of oil annually plus 17 tcf of gas for domestic consumption. It accomplishes this energy production feat while ranking as the highest taxed industry in the country with the lowest reserves and lowest production per well of any major world producer. To supply 70% of America's oil and 95% of its gas required 850,000 wells - about 625,000 oil and 225,000 gas.

Thirty years ago America enjoyed 60% of the world's Gross National Product. Today, much to our dismay, the U.S. has only 30% of the GNP. The trade deficit balance has reached an alarming $170 billion and is projected to exceed $180 billion in the next fiscal year. Oil imports have reached 42% and are contributing heavily to the historically high trade deficit balances.

The United States has lost control of its energy future. The nation and the American people are therefore exposed to disruptive economic and security threats more serious than any development short of war. These threats stem from one reality; the nation will be dependent on foreign oil for more than fifty percent of its oil requirements. Within the next couple of years, most of these imports will come from unstable and often hostile producers in the Persian Gulf, which own 69 percent of the free world's oil reserves. Unchecked and unchallenged, Persian Gulf oil producing countries have demonstrated a will and capacity to reduce America to a have-not status with respect to vital energy supplies. The dominant Arab OPEC oil producers proclaimed a two-fold purpose in their manipulation of petroleum markets and prices.

(1) Eliminate marginal, high-cost production of conventional energy, and

(2) Prevent development of energy alternatives substitutable for oil.

Hopefully, the combined pressures of budget deficits, depressed oil prices, and national security will lead Washington to alter its position and adopt an oil import fee. The budget deficit remains a serious problem, and most people on the Hill feel that some sort of tax increase will be necessary if budget targets are to be met. An oil import fee may ultimately prove to be easier to enact than raising taxes. Also, characterizing oil imports as a trade issue and adding the import fee to this legislation could prove to be a successful approach.

It's not likely major drilling efforts will be expended until oil prices reach the $22 to $25 range. The vast majority of major oil companies and independents are reporting sharply lower quarterly earnings due to the recent plunge in oil and gas prices. Profits are less than half that of a year earlier. It's evident that many other related and non-related businesses are severely impacted by the petroleum industry's fortunes and/or misfortunes.

The cost to the nation of the failure to make adequate investments in oil and gas goes far beyond the nominal price increased imports may carry.

As many as one million people may be forced out of work within the next twelve months, and as much as five billion barrels of the U.S. proved oil reserve base lost forever if current conditions in the oil market persist. Moreover within three years, the nation may find itself simply unable to meet its liquid fuel needs in the event it is required to bring its defense forces to a full mobilization.

Employment in the petroleum industry has suffered 500,000 casualties over the past four years, an additional 400,000 jobs have been lost in industries dependent upon the oil and gas business. The bottom line is 900,000 jobs have been lost to date. It's evident that government does not understand that oil and gas exploration is a major driving force within the U.S. economy.

For each dollar of direct investment in oil and gas, another two to two and one-half dollars of capital investment are generated elsewhere. To date, nearly 500,000 barrels per day of production have been lost, and according to estimates, over the next year, from 1 mbd to 1.6 mbd more may be lost as well.

The effects of insufficient drilling, and lost capacity could reduce America's domestic production to as little as 6 mbd within three years, a drop of 32 percent from the 8.9 mbd level at which production has been maintained. This would place U.S. import requirements at 60 percent of total demand as early as 1990.

To reverse this downtrend will necessitate drilling 100,000 new wells each year. Not a likely prospect with the present unstable low oil and gas price fiasco. Because oil and gas is a finite resource, the number of wells that must be drilled to maintain a stable reserve base actually increases slightly each year as the so-called "easy oil" and gas is discovered and consumed.

The importance of drilling to other sectors of the economy is best emphasized by a simple example. One 6,000 foot gas well for instance contains as much steel as 2,500 automobiles. In 1981, the nation was drilling 550 million feet. Currently, we are drilling at one-quarter of that pace. Comparatively, for every million feet of drilling that does not take place, the steel equivalent is 420,000 automobiles not sold! The fall off in drilling between 1984 and 1985 reduced steel demand equal to 20.5 million automobiles, or the combined output of all U.S. auto manufacturers over the past two years.

In essence, our petroleum fiasco has resulted in Saudis' oil exports to increase from $1 billion per month to $1.5 billion per month. Their exports to the U.S. increase from 27,000 b/d in September of 1985, to more than 800,000 b/d by mid 1986, or roughly 3,300 percent. It's easy to see that Saudi et al (OPEC) are victimizing our domestic oil and gas industry by oil dumping and gas pernicious price cutting to increase their world market share.

Sincerely,
UNIVERSAL FABRICATORS, INC.

Dailey J. Berard
President

DJB/dbl

LOUISIANA HOUSE OF REPRESENTATIVES

JOHN SIRACUSA
District 51

Phone (504) 384-0703
R.R. 3, Box 737
Morgan City, LA 70380

COMMITTEES
Judiciary
Labor and Industrial Relations
Natural Resources

February 9, 1987

Senator Bennett Johnston & U.S. Senate Energy Committee Hearing--

My district, district 51 consists of portions of three (3) parishes--Assumption, Terrebonne, and St. Mary parish.

Unemployment in Assumption Parish is right at 25%, St. Mary's unemployment is at 24% and Terrebonne's unemployment is at 20%.

There are over 130 commercial and industrial businesses that have closed their doors. Sixty (60) consumer type businesses are now shut down completely.

Different marine type businesses, such as boats, drilling rigs, pipe-laying barges, etc, based in my district, plus those not based in my district has come to an abrupt halt. In the marine industry we have boat companies that have gone under. In my district alone with the boats that are idle, if they were tied bow to stern, you could walk for five (5) miles and never touch the bank. Local canal barges and offshore barges would be the same.

Twenty thousand (20,000) people were working locally. They were employed by such companies as McDermott, Avondale, Brown & Root, Raymond International, Sante Fe and the lists goes on and on. At one time McDermott employed 3200 personnel, now they have less than 300, Avondale had 1600 plus, today they have four (4) contract hands working. Brown & Root has since shut down their yard at Morgan City and have rented it out for a storage facility, with no employees. Raymond International has closed down completely.

At one time, in front of my business office, when everything was booming, a total of 20,000 vehicles a day were using Hwy. 90, 2 lane. The traffic flow on Hwy. 90 is a good indicator of how the employment picture really stands, because it is the main artery of transportation on the Gulf Coast.

These are terrible economic times and I emphasize terrible economic conditions. Something has to be done to correct the situation. An import fee could be the solution to this problem. With the money derived from the import fee to used for one purpose only---to reduce the federal deficit. The import fee would give the economy some stability and confidence as well, both for the major and independent oil companies, to go gack into a drilling program and therefore create a more stable economy for everyone, once again.

H.C. HARRIS, JR.
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LAFAYETTE, LA. 70503
(318) 233-3936

February 6, 1987

Honorable Senator J. Bennett Johnston
136 Hart
Senate Office Building
Washington, D.C. 20510

Dear Sir:

I would like to present a line of thinking for your consideration. This line of thinking will be aimed at establishing a long term economic and political position on the governmental policies pertaining to the oil industry.

As a starting point, I would like to refer to President Reagan and the political powers of the Northeast and Mid West and their many declarations that the free market should dominate the oil industry.

Taken in a pure sense and establishing such a situation, there could be great merit in this proposition for the southern and southwestern oil producing states. This can only be true in a "free" market that is established by the government repealing all controls on the export of the United States of America domestic oil.

I talked to Mr. Rodney Joseph of the Department of Commerce (202/377-3984) the second week of October, and he informed me that only a small amount of oil out of the Cook Inlet in Alaska and USA oil going to Canada could receive a license to be exported.

To further pursue the concept that the export of domestic oil would solve a lot of the problems of the oil drilling and producing industries of the U.S., I refer you to the enclosed newspaper clipping of October 12, 1986 from the Sunday Advocate. This contains news about Japan investing in drilling oil wells in North Dakota. This indicates that many of the oil importing nations of the world would be interested in investing in drilling and owning oil production in the United States if they were allowed to export it to their own country for their own use. It would appear that such incentive could possibly solve our dilemna and economic distress caused by the idle drilling rigs in this country.

The only fall-back possible at present to foreign investors, or governments, owning production in this country is that they are allowed to export refined products. However, it is obvious that it would be discouraging to foreign owners to have to go through the problems of drilling and finding oil and making a deal with some refinery complex before they could export what they owned.

In my opinion, this approach would not have any long term draw-backs, such as the other two political/economic approaches which are commonly suggested by industry people. These two approaches are the import tax --- with the political and exemption handicap, and the limiting domestic production approach with the brick wall dead-end of no drilling to find more production.

Any foreign country or investor would also undoubtedly take notice of the fact that various oil producing regions of the United States, such as the Gulf of Mexico, are relatively unique in that they are prolific and they are safe politically from governmental confiscation.

I would seem that a proposal based on this approach made by the Chairman of the Senate Energy Committee would be the most powerful forum in which to initiate an attack on the Reagan free market position. It is time to throw Reagan's free market speeches back in his teeth.

Respectfully presented for your study and consideration.

Yours very truly,

HC Harris Jr.

H.C. Harris, Jr.

HCH/jm

encl.

Country

SUNDAY ADVOCATE Baton Rouge, Louisiana Oct. 12, 1986

Japanese take long-range view of oil exploration

By DONALD WOUTAT
and ANDREW HORVAT
(c) 1986, Los Angeles Times

The news from North Dakota on Aug. 12 wasn't that unusual in itself: another oil discovery in the Williston Basin, a prime oil region in the western-most part of the state.

But the success at the L.M. Stenehjem No. 2 well stands out because much of it was paid for by the Japanese government.

Japan National Oil Co., in support of Nippon Oil, one of that nation's major oil companies, provided a big chunk of the financing for the North Dakota well in a joint exploration and drilling venture launched earlier this year with Texaco.

That the Japanese were rooting around 14,000 feet below ground in McKenzie County, N.D., in the summer of 1986, at the apparent nadir of the most precipitous oil-price collapse in modern times, seems a particularly vivid example of Japan's long view of things.

This year's collapse in the price of crude oil has prompted the major U.S. oil companies to slash exploration budgets and eliminate tens of thousands of jobs at home and abroad. And the tax reform package recently signed by President Reagan modestly trims the financial incentives to explore for oil.

Meanwhile, Uncle Sam has begun to nibble away at such 1970s-vintage energy conservation measures as the 55-mile-per-hour speed limit and auto fuel economy requirements.

But in Japan, a panel of the government-appointed Petroleum Council warned in August that prices will rise again and oil supplies will grow short. The committee set a 1995 goal of nearly tripling the paltry 11 percent share of the nation's oil needs which now come through its own oil companies. Thus the Japanese are stepping up their pace of overseas oil exploration, to as many as 30 projects from 10 last year and 3 the year before.

In the process, two Japanese companies have undertaken major ventures in the U.S. oil patch this year for the first time: Nippon Oil in a $100 million deal with Texaco to drill up to 50 wells in six states, and Nippon Mining in a $135 million joint venture with Conoco which contemplates 20 wells in five states.

"The Japanese simply are willing to take the longer view. It's quite a contrast to our own situation, where we have a combination of government and investor complacency," said G. Henry M. Schuler, energy-security expert at the Georgetown University Center for Strategic and International Studies and a onetime oil executive in the Middle East.

"Here, the government is so complacent it's actually creating barriers to exploration. There's a recognition in Japan that U.S. oil properties are depressed because we have such a short horizon. The largest U.S. oil companies are simply unable to look beyond the next quarterly financial report."

The apparent contrast between Japanese and U.S. attitudes on oil rings a bell heard earlier in the automotive, electronics and other industries.

SEE JAPAN, 4I

Japan

CONTINUED FROM 1I

Japan's central planning effort and direct government support of key industries have driven that nation's postwar economy ahead.

But in the case of oil, the parallels are limited because the two nations' resources are so different.

While the United States has thousands of large and small oil companies which pump 60 percent to 70 percent of the nation's oil needs from U.S. lands, Japan gets virtually all its oil from other nations and nearly 90 percent of it is pumped and processed by foreign-based companies.

Thus while President Carter did not strike much of a nerve with his 1977 declaration of the "moral equivalent of war" to seek energy independence, Japan has an obsession with energy security that dates to the late 19th century when foreign oil companies set up shop there.

In 1941, it was an American oil embargo of Japan — intended by President Roosevelt to halt Japan's war with China's Chiang Kai-shek — that led ultimately to the bombing of Pearl Harbor. In 1973, the Arab oil embargo not only touched off panic buying by Japanese consumers but subjected the nation to diplomatic blackmail when the Arabs pressured Japan to break off ties with Israel.

This oil history led to the creation of a national oil company, JNOC, which has been backing its own oil companies — principally refiners of other nations' products — in searches for oil around the world. The effort, in which the government has spent $400 million to $500 million a year in the 1980s, has so far done little to reduce Japan's energy vulnerability.

Now, the same climate that has idled hundreds of drilling rigs and slowed seismic work to a crawl around the world has proved a boon to the forward-looking Japanese. Their oil companies are flush with cash, the cost of exploration and drilling rights has fallen sharply, and the strengthened yen goes nearly twice as far in the United States as it did a year ago.

Because Japan's oil companies are mainly refiners, they benefit from lower-priced crude. So, in contrast to such multinational producers as Texaco and Conoco, the seven biggest Japanese petroleum companies are expected to record a 250 percent surge in pretax profits this year. The stronger yen, meanwhile, would buy nearly $900 million worth of exploration this year under the current JNOC budget — or more than double last year's expenditures in dollar terms.

Texaco says that it was near an agreement with Nippon Oil when oil prices collapsed last December. But rather than pull out and await higher prices, Nippon Oil, heavily supported by a government whose priority remains "medium and long-term oil supplies," signed the papers in February.

John N. Ehe, vice president for exploration in Texaco's western region, called it "kind of a gallant decision" to proceed. But he noted that, for example, Nippon Oil was subsequently able to hire an off-shore rig near Santa Barbara, Calif., for $35,000 a day versus the $55,000 it would have taken a year earlier when times were better.

"At depressed prices and with a high-valued yen, why not?" asks Schuler of Japan's aggressiveness. "They know this (price collapse) is only a blip. For them, this is an energy-security opportunity plus an investment opportunity."

The Conoco and Texaco joint ventures now present an ironic situation: on those properties at least, the Japanese government is doing more than the U.S. government to foster the discovery of U.S. oil. Both domestic companies said that they probably wouldn't be drilling those holes if it weren't for the Japanese investment. In oil, there isn't much capital around these days.

Conoco says that it sought out Nippon Mining about six months ago.

"We were looking for a way to spread our exploration dollars. This allowed us to drill up several leases on prospects we might not have gotten to without their capital," a Conoco spokeswoman said.

Meanwhile, the ban on exporting most U.S. crude oil assures a nice side benefit for the United States: in both ventures, all the U.S. crude will remain here and the Japanese will get their share through a swap for oil from Texaco and Conoco overseas reserves, perhaps in Indonesia.

Because each barrel of newly discovered U.S. oil displaces a barrel of foreign oil, this arrangement not only improves the nation's energy security but nibbles a few dollars off the enormous U.S. deficit in its balance of payments.

The 70 exploratory wells to be drilled over three years by the two ventures won't exactly turn the domestic industry around. About 45,000 wildcat and exploratory wells were drilled in this country over the previous three years. Texaco says that perhaps 200 U.S. jobs will be created by the venture with Nippon Oil, not counting the subsequent development of whatever oil is found. More than 100,000 oil-field jobs have been lost this year.

In addition to the North Dakota discovery, the venture has drilled two dry holes offshore from California and plans up to three more offshore wells. It also plans to drill in Texas, Colorado, New Mexico and Utah. Fourteen of the Conoco-Nippon Mining wells will be drilled in the Gulf of Mexico and the rest in Texas, Louisiana, Montana, Colorado and Alabama.

None of the principals would divulge many financial details. The Japanese support of drilling and other costs varies from hole to hole, according to Texaco. In the past, JNOC has paid up to 60 percent of a Japanese company's costs in a project and wants to raise this to 70 percent.

Now, A Checking Account
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The Gas Processing Industry:

Its Function and Role in Energy Supplies

Gas Processors Association
1812 First Place
Tulsa, OK 74103

INTRODUCTION

The gas processing industry is a major segment of the oil and gas industry, distinct from either crude oil or natural gas production, separate from oil refining or gas distribution, yet indispensable to all. As a separate and identifiable function, it is probably the least known and least understood part of the petroleum industry.

In simple terms, the gas processing industry refines raw natural gas from the earth into saleable, useful energy forms for use in a wide variety of applications. Through the gas processing industry's plants flows approximately 60% of the nation's petroleum energy production, which emerges in the form of merchantable natural gas, liquefied petroleum gases, motor fuel components, and raw materials for a myriad of basic petrochemicals.

Natural gas occurs deep below the surface of the earth in two principal forms: associated gas and non-associated gas.

Associated gas is found in crude oil reservoirs, either dissolved in the crude oil, or in conjunction with crude oil deposits. It is produced from oil wells along with the crude. It separates, or is separated from, the oil at the casinghead of the well, which leads to the synonymous term "casinghead gas." It may also be called "oil-well gas" or "dissolved gas." In the industry's beginning, virtually all processed gas was from oil wells.

Non-associated gas occurs in reservoirs separate from crude oil. Its production is not incidental to the production of crude oil. It is commonly called "gas well gas" or "dry gas." Today about 75% of all natural gas produced is non-associated gas.

In addition, the reservoirs of many oil fields found since 1935 produce neither true gases nor true liquids. The material might properly be called a "two-phase fluid." It is neither a gas because of its high density, nor a liquid because no surface boundary exists between gas and liquid. These reservoirs, called "gas condensate" reservoirs, are usually deeper with higher pressures, which pose special problems in production and processing

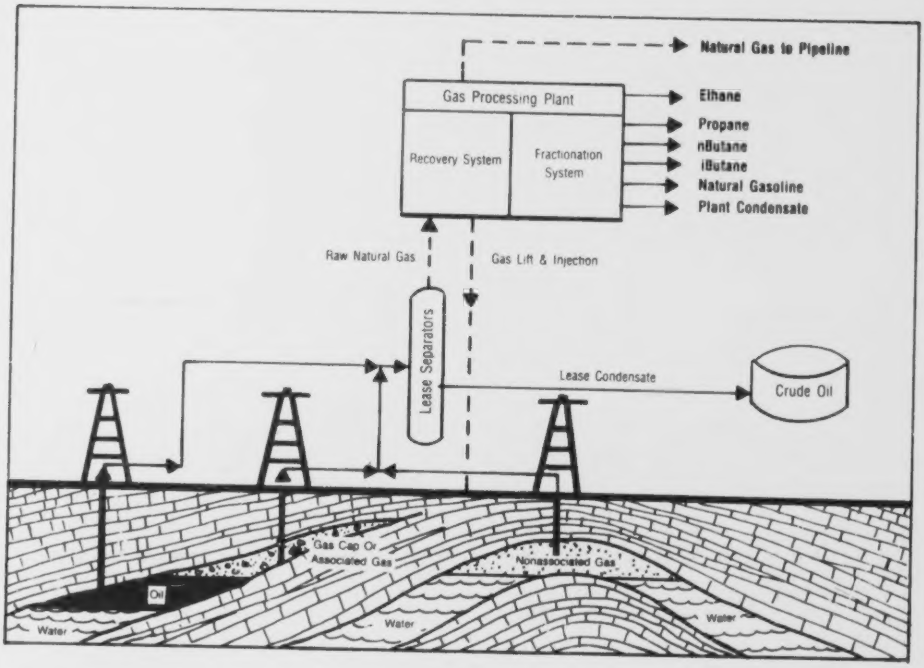
From whatever reservoir, natural gas as produced from the earth has widely varying composition, depending on the field, the formation, or the reservoir from which it is produced. The principal constituents of natural gas are methane and ethane, but most gases contain varying amounts of heavier components, such as propane, butane, pentane, and heavier hydrocarbons that may be removed by any of a number of processing methods.

The removal of individual hydrocarbons by processing is possible because of the differences in physical properties. Each component has a distinctive weight, boiling point, and other physical characteristics, making its separation from other components a relatively simple physical operation.

Gas processors describe gas as "rich" (wet), or "lean" (dry) depending on its content of heavy components. These are relative terms, but as used in the industry, a rich gas may contain five or six gallons or more of recoverable hydrocarbons per thousand cubic feet; a lean gas usually contains less than one gallon of recoverable liquids per thousand cubic feet.

Natural gas may also contain water, hydrogen sulfide, carbon dioxide, nitrogen, helium, or other components that may be diluents and/or contaminants. In any case, natural gas as produced rarely is suitable for pipe line transportation or commercial use. Natural gas in commercial distribution systems is composed almost entirely of methane and ethane, with moisture and other contaminants removed to very low concentrations.

Therefore, all natural gas is processed in some manner to remove unwanted


Natural Gas to Pipeline
Gas Processing Plant
Recovery System
Fractionation System
Ethane
Propane
nButane
iButane
Natural Gasoline
Plant Condensate
Raw Natural Gas
Gas Lift & Injection
Lease Separators
Lease Condensate
Crude Oil
Gas Cap Or Associated Gas
Nonassociated Gas
Oil
Water
Water
Water

water vapor, solids and/or other contaminants that would interfere with pipe line transportation or marketing of the gas. In addition, and equally important, most natural gas is processed to separate from the gas those hydrocarbon liquids that have higher value as separate products.

These natural gas liquids (NGL's) are part of a family of saturated hydrocarbons called paraffins. Each compound has a chemical formula C_nH_{2n+2}. The principal natural gas liquids include:

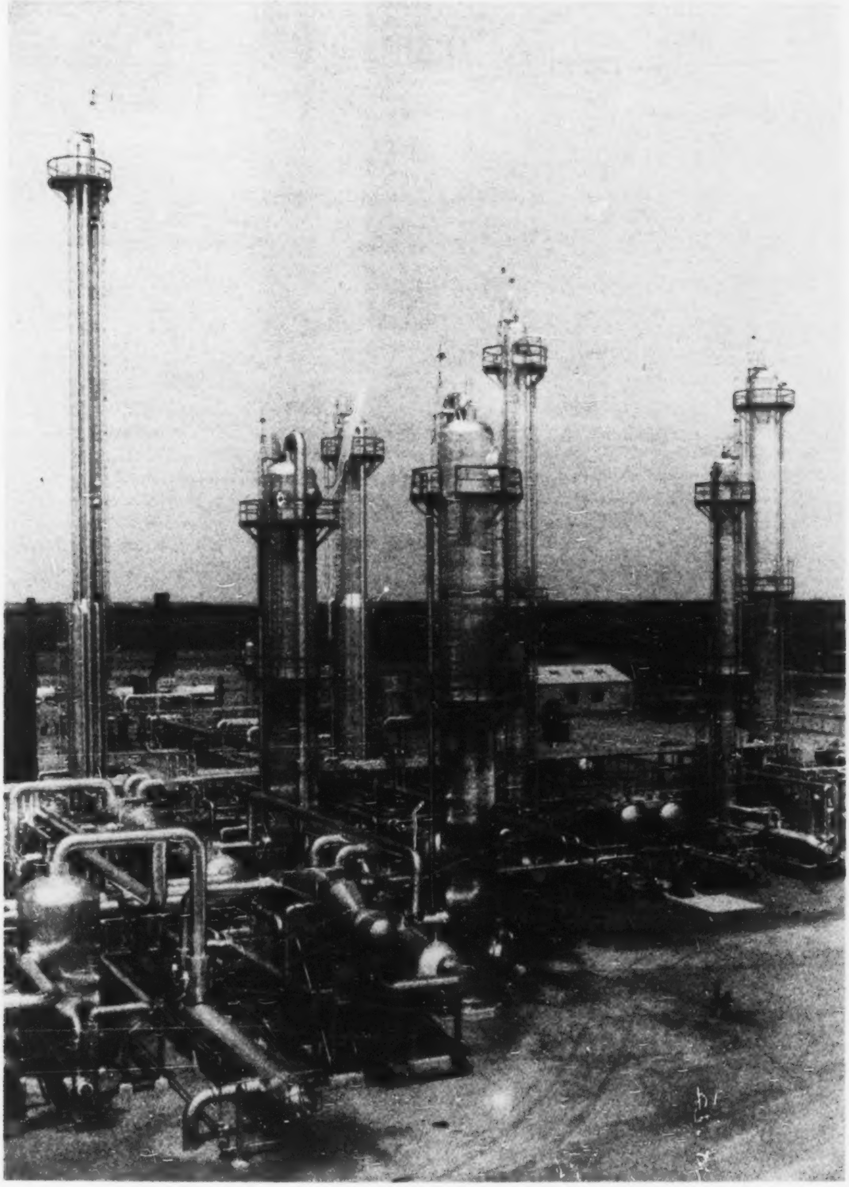
Ethane: Exists as a liquid only under very high pressures (800 psi) or at extremely low temperatures (−135°F). It is recovered and transported in either the liquid or gaseous state principally for use as feedstock for ethylene, the most important basic petrochemical produced today.

Propane: Recovered and handled as a liquid at pressures over 200 pounds, or at temperatures below −44°F. Its principal uses are as feedstock for production of ethylene and propylene, and as LP-gas for heating fuel, engine fuel, and industrial fuel.

Butane: Recovered and handled as a liquid under moderate pressure. Its principal uses are to provide needed volatility to gasoline motor fuel; as domestic LP-gas fuel, either alone or in mixtures with propane; and as a feedstock for the manufacture of butadiene, a key ingredient of synthetic rubber.

Iso-butane: The chemical isomer of butane, it is fractionated and produced as a separate product principally for the manufacture of alkylate, a vital ingredient of high-octane motor gasoline.

Natural Gasoline: A mixture of pentanes and heavier hydrocarbons, with small amounts of butane and iso-butane. Industry specifications define its physical



4

properties in terms of vapor pressure at 100 F (10 to 34 psi), and percentage evaporated at 140°F (25 to 85%). It is recovered as a liquid, principally for use as a motor fuel component.

If the gas contains hydrogen sulfide, a poisonous gas, it is removed and further processed for recovery of elemental sulfur. Most carbon dioxide is removed to prevent destructive corrosion and to inject into crude oil reservoirs for enhanced oil recovery (EOR). Some helium is extracted for its unique properties as an inert gas.

In addition, gas processing performs vital functions, both economically and technically, in the recovery of crude oil through reservoir pressure maintenance, miscible floods, and other secondary recovery methods. Many of these projects would not be economically possible except for the revenues generated by extraction and sale of natural gas liquids.

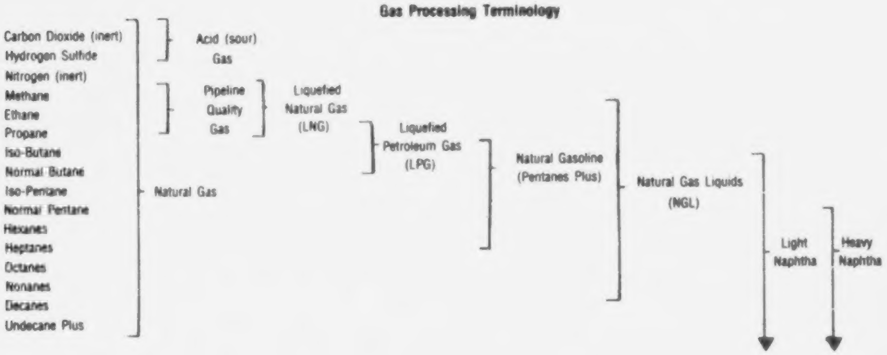
PROCESSING AND MANUFACTURE

Natural gas processing involves two basic operations: (1) extraction of the natural gas liquids from the gas stream; and (2) fractionation of the natural gas liquids into their separate components. Additional processing is usually required to treat and condition both the natural gas and the gas liquids.

Natural gas processing may be as simple as drying the gas by passing it through a fixed bed of a desiccant material, or it may be as complex as complete liquefaction of the total gas stream by cooling to extremely low temperatures. Extraction of heavier gas liquids (pentane and heavier) can be achieved by simple compression and moderate cooling of the natural gas stream.

However, the modern gas processing industry uses a variety of sophisticated processes to treat natural gas and extract natural gas liquids from the gas stream. The two most important extraction processes are the absorption and cryogenic expander processes. Together, these processes account for an estimated 90% of total natural gas liquids production.

Gas Processing Terminology


Carbon Dioxide (inert)
Hydrogen Sulfide
Nitrogen (inert)
Methane
Ethane
Propane
Iso-Butane
Normal Butane
Iso-Pentane
Normal Pentane
Hexanes
Heptanes
Octanes
Nonanes
Decanes
Undecane Plus
Acid (sour) Gas
Pipeline Quality Gas
Natural Gas
Liquefied Natural Gas (LNG)
Liquefied Petroleum Gas (LPG)
Natural Gasoline (Pentanes Plus)
Natural Gas Liquids (NGL)
Light Naphtha
Heavy Naphtha

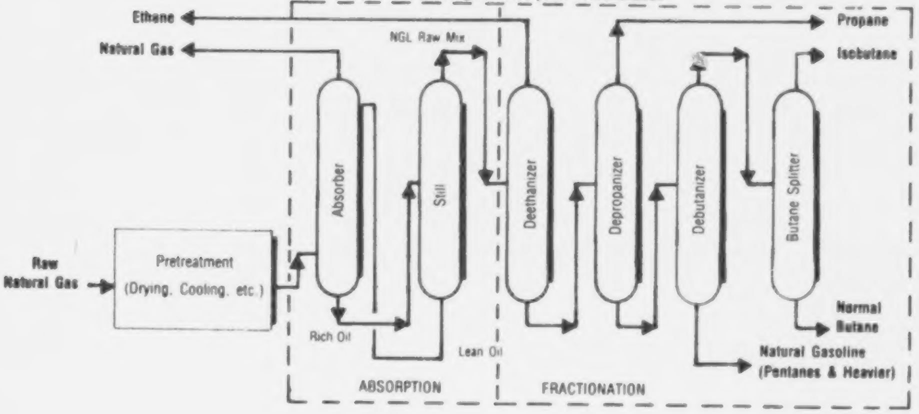
ABSORPTION PROCESS

The basic step in the absorption process is removal of NGL components from the natural gas by contact with an absorbing oil. Liquid recovery is enhanced by refrigerating the absorption oil. Recovery levels may also be increased by lowering the molecular weight of the absorption oil. Depending on operating conditions, approximately 85% of the propane and essentially all of the heavier natural gas liquids are absorbed in the oil. The lighter fractions – methane, ethane, and some of the propane – are not recovered in the absorbing oil and pass through the absorber tower as merchantable pipeline quality natural gas.

The bottoms effluent from the absorption tower consists of rich absorption oil mixed with absorbed propane, butanes, pentanes, and other heavier natural gas liquids. This stream is then fed to lean oil stills where the absorbed liquids are distilled from the absorber oil by heating the mixture to a temperature above the boiling point of the natural gas liquids, but below that of the absorber oil. The stripped absorber oil is then recirculated to the absorption tower, and the mixed stream of natural gas liquids is piped to the fractionation system for further separation into individual NGL components.

The fractionation system may be an integral part of the gas processing plant, or it may be a "central fractionator" many miles from the primary production. A central fractionator may receive mixed streams of natural gas liquids from many plants.

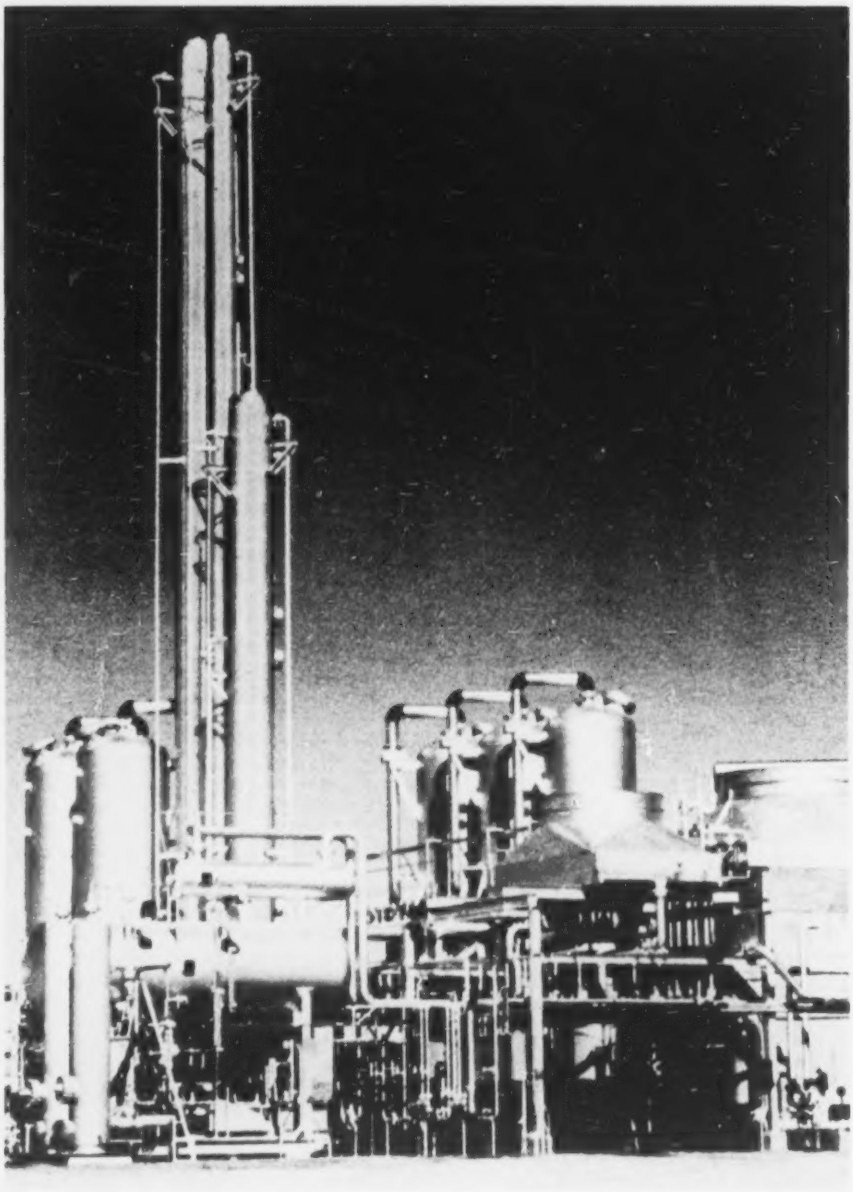
Simplified Flow Diagram Absorption—Fractionation


Ethane
Natural Gas
NGL Raw Mix
Propane
Isobutane
Absorber
Still
Deethanizer
Depropanizer
Debutanizer
Butane Splitter
Raw Natural Gas
Pretreatment (Drying, Cooling, etc.)
Rich Oil
Lean Oil
Normal Butane
Natural Gasoline (Pentanes & Heavier)
ABSORPTION
FRACTIONATION

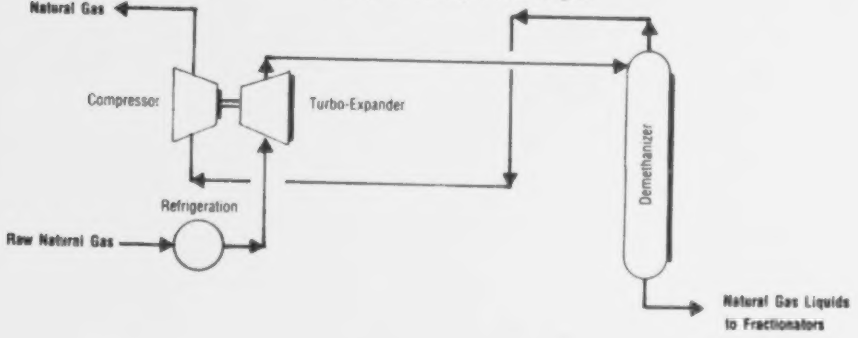
TURBO EXPANDER PROCESS

In recent years, ethane has become increasingly desirable as a petrochemical feedstock. This has resulted in the construction of many plants that recover ethane and heavier hydrocarbons from natural gas at temperatures ranging down to minus 150°F.

Combinations of external refrigeration and liquid flash-expansion refrigeration with gas turbo expansion cycles are employed to attain the low temperatures desired for high ethane recovery.



Simplified Turbo-Expander Flow Diagram



In the turbo-expander process, the absorber and still facilities are replaced by an expansion turbine, which accomplishes the separation of gas liquids from the natural gas stream by auto-refrigeration to extremely low temperatures.

Recoveries of 90-95% ethane and all of the heavier hydrocarbons have been achieved with the expander process. The mixed liquid product from the expander plant is then fractionated or may be delivered by pipeline to a central fractionation facility for fractionation into separate NGL components.

FRACTIONATION

Fractionation of a mixed NGL stream into separate components is accomplished by controlling the temperature of the stream in a fractionator to take advantage of the difference in boiling points of separate products. Fractionators are usually named for the overhead or top product. Therefore, a deethanizer implies that the top product is ethane; a depropanizer indicates that the top product is propane, etc. Natural gas liquids are normally fractionated by boiling the lighter products from the heavier products in the following order:

Deethanizer: The first step in the fractionating sequence is to separate the ethane and propane, with the ethane going overhead and the propane and heavier components passing from the bottom of the fractionator.

Depropanizer: The next step in the processing sequence is to separate the propane and the isobutane, with the propane going overhead and the isobutane and heavier components passing from the bottom of the depropanizer.

Debutanizer: The next fractionation step is separation of the butanes from the pentanes plus stream. The butanes (both iso and normal) pass overhead and the pentanes plus pass from the bottom of the fractionator.

Butane Splitter or Deisobutanizer: When it is desirable to do so, the butanes which pass overhead from the debutanizer may be separated into iso and normal butanes. The isobutane goes overhead and the normal butane is drawn from the bottom of the tower.

OTHER ROUTINE GAS PROCESSING

As noted earlier, both natural gas and natural gas liquids may require additional treating or processing, either before or after extraction of liquids.

The most common treatment of natural gas is removal of excess water vapor, which is necessary to prevent formation of hydrates and freezing in pipeline transmission systems. Techniques for dehydrating natural gas include:

- Absorption using liquid desiccants, usually a glycol compound
- Adsorption, using solid desiccants such as silica gel, activated alumina, or molecular sieves
- Dew point depression by injection of anti-freeze compounds such as glycols or alcohols
- Expansion refrigeration which cools the gas stream below the dew point of entrained water vapor.

Removal of excess moisture from some natural gas liquids, principally propane, is also necessary and is accomplished most often with solid desiccants or molecular sieves.

Additional treatment of both natural gas and natural gas liquids is usually required to remove hydrogen sulfide and carbon dioxide. This process in the industry is called "sweetening." Many process methods are used, most of which rely on either chemical reactions, physical solution, or adsorption. Each process has unique advantages, depending on the concentration of hydrogen sulfide, carbon dioxide, and other conditions.

The most common chemical processes are based on contact with amine solutions. These solutions react with unwanted acid gas constituents to form other compounds which can then be removed.

Physical solvent processes include a number of patented chemicals and processing schemes which function much the same as the oil absorption process for removal of liquids from gas.

Adsorption processes involve the removal of unwanted components by passing the gas or liquid through a bed of solid material that has been designed or treated to selectively extract carbon dioxide, hydrogen sulfide, or other contaminants.

SULFUR RECOVERY

The sour gas effluent from a sweetening unit must be further treated, either for disposal or for recovery of sulfur contained in the gas. At plants where hydrogen sulfide concentrations are very low, it is not economical to install sulfur recovery facilities. In these cases, the sour gas is disposed of by incineration.

At higher concentrations, the sour gas is usually processed in a sulfur recovery facility to recover elemental sulfur. The Claus process is the most widely used process for converting hydrogen sulfide into elemental sulfur. The process utilizes thermal and catalytic reactions to achieve conversion of up to 97% of hydrogen sulfide to elemental sulfur. "Tail gas clean up" processes reduce sulfur emissions significantly and boost overall efficiency of sulfur recovery to 98+%.

OTHER SPECIALIZED GAS PROCESSING

Depending on gas composition and other factors, the gas processing function may also include additional processing such as:

- Carbon dioxide removal and transport for enhanced oil recovery
- Helium recovery for commercial sale
- Nitrogen removal to increase heating value of the gas
- Liquefaction of the total gas stream to produce liquefied natural gas.

All of these process functions require specialized processes and additional investment.

PROFILE OF THE U.S. GAS PROCESSING INDUSTRY

PROCESSING PLANTS

There are approximately 859 gas processing plants in the United States, most of which are located in five states: Texas, Louisiana, Oklahoma, Kansas, and New Mexico. These five states account for about 86% of total U.S. gas processing capacity, gas processed, and natural gas liquids production.

Plant sizes range from less than 1 million cubic feet per day up to more than 2.5 billion cubic feet per day. The 200 smallest plants (about 25% of total) are less than 10 million cubic feet per day capacity, and account for only about 1% of total industry capacity.

The 200 largest plants (25% of total) have capacities greater than 80 million cubic feet per day and account for nearly 80% of total industry capacity. Approximately 92% of total gas capacity is in 375 plants (44% of total) with capacities greater than 35 million cubic feet per day. Production of natural gas liquids averages less than 2,000 barrels per day per plant, with maximum production ranging up to 25,000 barrels per day in the largest plants.

Approximately 100 of the 859 U.S. gas processing plants include sulfur recovery facilities, with a total capacity of about 4,500 tons per day of elemental sulfur. Sulfur production from gas plants accounts for about 13% of total U.S. sulfur production.

In addition, there are approximately 20 central fractionating plants operating in the United States. These fractionators may handle the mixed natural gas liquids production of a single separation facility, or may process mixed streams from many plants, some of which may be located hundreds of miles away. These fractionators separate these raw mixed NGL streams from recovery facilities into saleable products such as ethane, propane, butane, or specified mixtures, according to the user's needs.

COMPANIES

The U.S. gas processing industry is composed of an estimated 300 companies, ranging in size from the largest integrated oil companies to the single plant owner-operator.

The 20 largest gas processing companies produce about 70% of total U.S. production of natural gas liquids.

U.S. GAS PROCESSING PLANTS

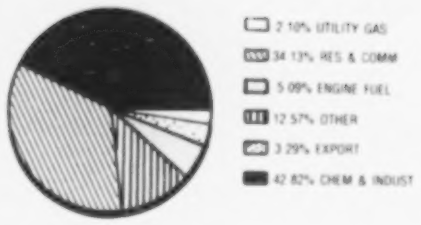
State	No. Plants	Gas Capacity, mmcfd	Gas throughput, mmcfd	NGL Products, m B/D
Texas	411	25,090	13,380	618
Louisiana	100	22,601	14,070	333
Oklahoma	103	4,765	3,110	145
Kansas	23	4,894	2,648	45
New Mexico	41	3,626	2,211	96
	678	60,976	35,419	1,237
Other	181	9,508	5,738	218
U.S. Total	859	70,484	41,157	1,455

NATURAL GAS LIQUIDS SUPPLY/DEMAND

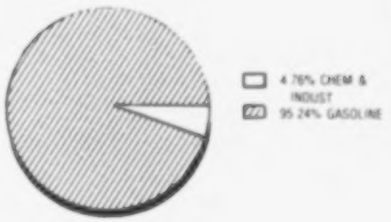
U.S. gas plant production of natural gas liquids totals some 570 million barrels per year, or approximately 1.5 million barrels per day. The distribution of this production during 1984 is as follows:

Ethane	28.7%
Propane	34.2%
Normal and Iso-Butane	19.6%
Pentanes plus, including plant condensate	17.5%

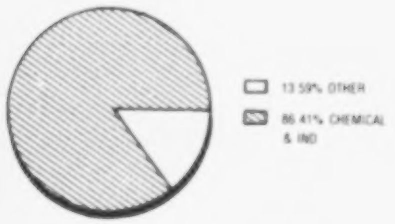
PROPANE CONSUMPTION



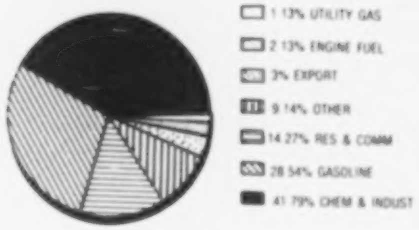
PENTANES + CONSUMPTION



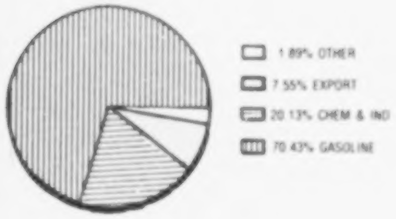
ETHANE CONSUMPTION



NGL CONSUMPTION



BUTANE CONSUMPTION

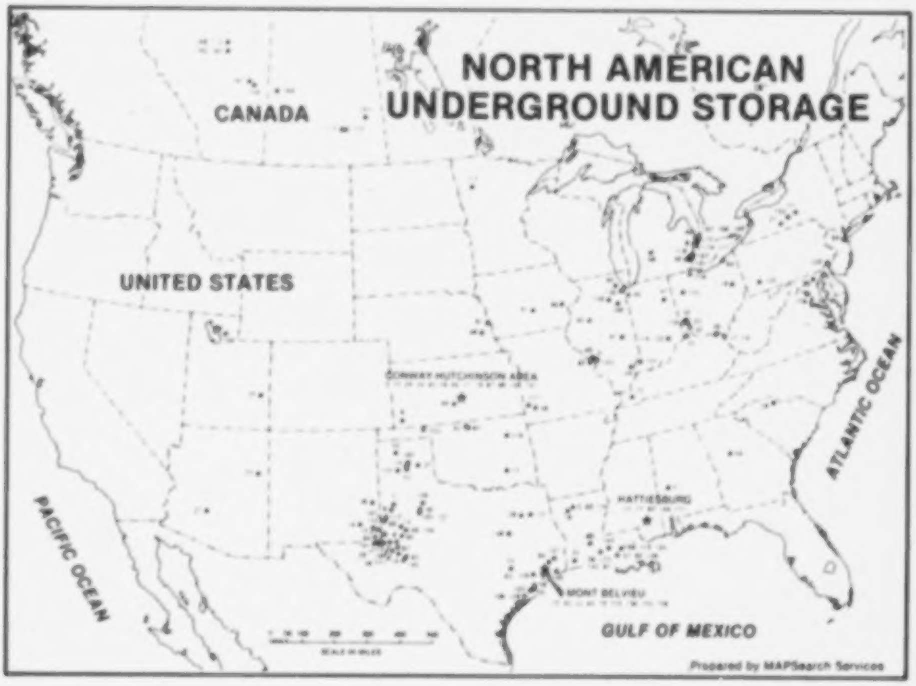


PHYSICAL PROPERTIES OF NATURAL GAS LIQUIDS COMPONENTS

Component	Vapor Pressure psia @ 100 F.	Boiling Point °F @ 14.7 psia	Liquid Specific Gravity 60 F./60 F.
Methane	(5,000)*	−258.73	(0.3)*
Ethane	(800)*	−127.44	0.35619
Propane	188.64	−43.75	0.50698
n-Butane	51.706	31.08	0.58401
i-Butane	72.581	10.78	0.56286
n-Pentane	15.574	96.92	0.63111
i-Pentane	20.445	82.12	0.62470
Hexane	4.96	155.72	0.66382
Heptane	1.62	209.16	0.68819

*Estimated values in NGL blends

In addition, field facilities handling natural gas prior to delivery into a gas processing plant produce an estimated 350 thousand barrels per day of lease condensate, which is usually transported to refineries along with crude oil.

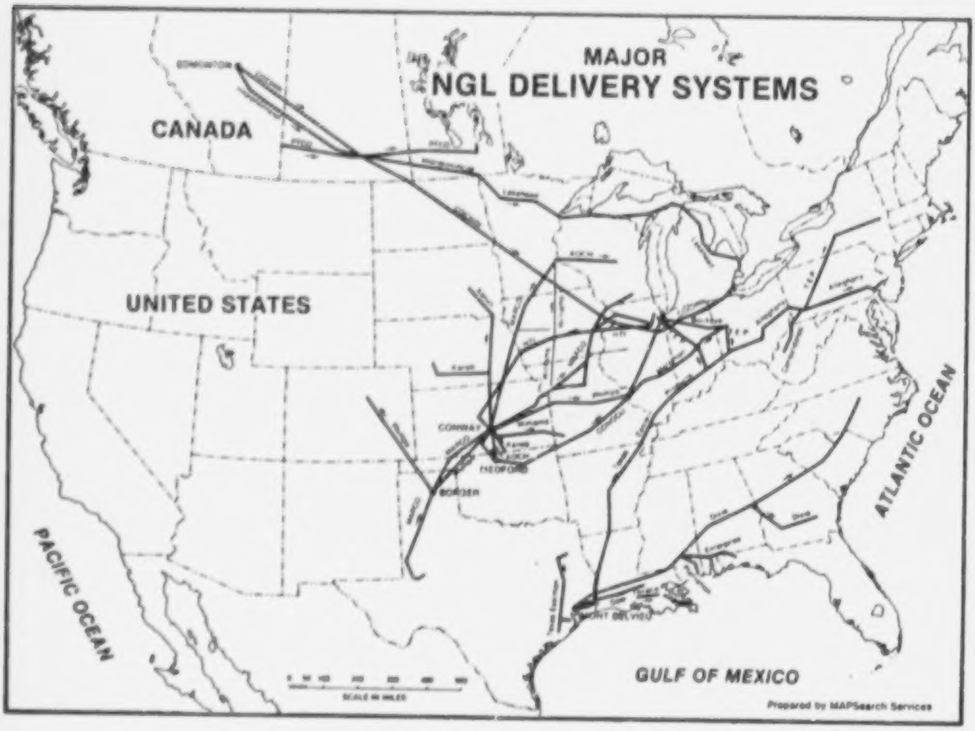

NORTH AMERICAN UNDERGROUND STORAGE
CANADA
UNITED STATES
CONWAY-HUTCHINSON AREA
HATTIESBURG
MONT BELVIEU
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
SCALE IN MILES
Prepared by MAPSearch Services

Total U.S. supply of natural gas liquids is augmented by refinery production and imports.

Refineries produce and market about 120 million barrels per year, or about 325 thousand barrels per day, of natural gas liquids, mainly propane. Refinery yields of natural gas liquids amount to 2-3% of total crude oil charged to the refinery.

Total imports of natural gas liquids are approximately 70 million barrels per year, or roughly 200 thousand barrels per day. About 80% of these imports are from Canada.

Approximately 80% of total U.S. natural gas liquids production is consumed in three major uses: petrochemical feedstocks; motor gasoline manufacture; and residential and commercial heating fuels. The remainder is used in a wide variety of applications, including engine fuels, industrial fuels, utility peak shaving, crop drying, and other agricultural and process fuel applications.


MAJOR
NGL DELIVERY SYSTEMS
CANADA
EDMONTON
UNITED STATES
KOCH
CONWAY
MEDFORD
BORGER
MONT BELVIEU
PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
SCALE IN MILES
Prepared by MAPSearch Services

TRANSPORTATION AND STORAGE

A national network of some 70 thousand miles of high pressure pipelines transport unfractionated NGL streams from production areas to fractionating centers and then transport finished products to major markets.

Four major pipelines extend from the West Texas-New Mexico fields to the major terminal and fractionation center of the U.S. — Mont Belvieu, Texas, located near the petrochemical and refining center of the nation. Other pipeline systems deliver West Texas/New Mexico natural gas liquids to a second major terminal, storage, and fractionation point in central Kansas.

From Mont Belvieu, two major pipeline systems deliver LP gas fuels to the northeastern and southeastern United States.

Several pipeline systems extend from central Kansas storage and fractionating facilities into west and upper midwest markets.

Total natural gas liquids production is relatively constant throughout the year. However, depending on weather and other factors, demand may vary considerably. Therefore the industry has installed and operates underground storage facilities totaling nearly half a billion barrels capacity. The bulk of this capacity is located near the refining and petrochemical complexes of the Texas and Louisiana Gulf Coasts, with a second major installation in the midcontinent hub of central Kansas.

CONGRESSIONAL OVERSIGHT HEARINGS

March 2, 1987

Submitted by: Russel A. Buss
904 Mountain View Drive
Aztec, NM 87410

(505) 334-3209

PROBLEM: The market for crude oil, natural gas, and natural gas liquids has become a buyer's market. U.S. producers extracting products from a smaller reserve base are losing market share to imported oil, oil products, finished petroleum products, and natural gas. Our country's dependency on imports is growing to a critical state with an increasing balance of payment burden. The U.S. economy is suffering from loss of sales, lost taxes on sales and loss of jobs in drilling, production, transportation, manufacturing, service, and selling industries related to petroleum. Reserves of natural gas which are not being replenished are being used to heat homes without good alternatives for households should a shortage occur.

SOLUTIONS:

The Federal Government and State Governments must delicately manage a vital industry which has gone from the highs of a seller's market to the lows of a buyer's market in two years.

1.) Determine the maximum level of dependency on imported energy the U.S. can tolerate longterm.

2.) Adjust taxes either levied or not levied on domestic production to stimulate or reduce the domestic oil and gas industry.

3.) Adjust taxes either levied or not levied on imports of oil, gas or finished products to maintain the degree of dependency below the desired level.

4.) Review fairness of every phase of costs of the remaining regulation of transporting, treating, processing, and distributing natural gas.

5.) Review the liability insurance awarding process.

6.) Review the safety regulations and environmental protection regulations imposed on the oil industry some of which are unreasonable.

Russel A. Buss

BENEFITS: 1.) Reduces dependency level on foreign imports.

2.) Maintains prices for products at an acceptable leve.

3.) All parts of the economy operate at fair levels of profit and affluence without boom and bust cycles.

PRESENT SITUATION:

The U.S. economy is booming and busting between the energy producing states'economies and the consumer states' economies with the overall economy losing with each cycle to importer countries and to a service industry who are salesmen for the importers. The NGPA Act of 1978 on natural gas turned out to be bad legislation at its termination in 1985 and its final years, 1983 through 1985, are an example of the boom/bust cycle.

The U.S. will lose its standing in the world if we do not learn how to manage this situation. All of us who are citizens are responsible for our present situation. Our government and we, the people, can not function in the long run unless products and services are sold at a profit. Government must manage this problem delicately, but not take control to solve it. The ultimate solution is the responsibility of the citizens of the U.S. and the oil and gas industry and other energy producers to deliver energy at prices which consumers can afford and still make an acceptable profit.

Attached for your review is a proposed change in taxation the State of New Mexico should implement to help insure the viability of its natural gas producing industry.

Respectfully submitted,

Russel A. Buss

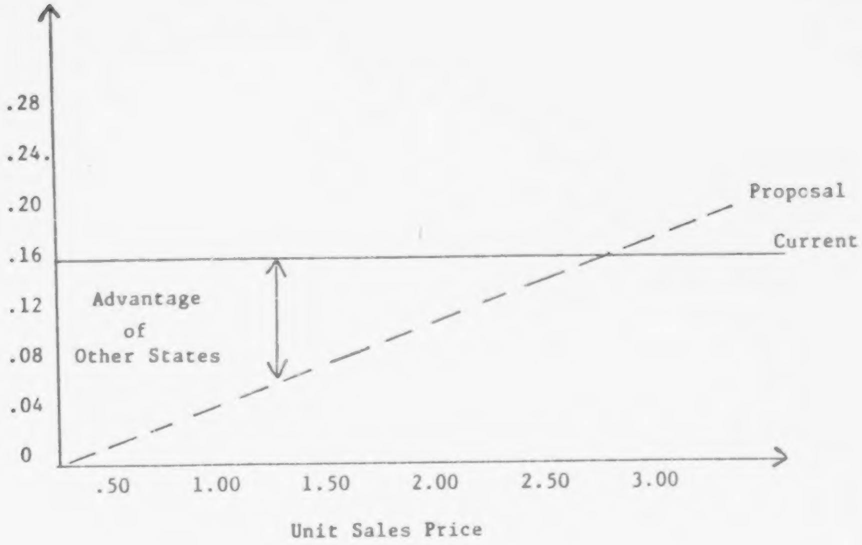
ATTACHMENT

The method of levying severance taxes on natural gas in New Mexico should be changed from a flat rate per unit to a percentage. The percentage rate should then be set at a rate competitive to rates levied in competing states such as Texas and Oklahoma.

Benefits:

1. Allow our New Mexico producers to hold market shares in a competitve commodity market.
2. Prevent further loss of jobs in this key extractive industry.
3. Hold the line or possibly increase drilling activity in New Mexico.
4. Allow producers to get on with business automatically providing more state revenues when good times return.
5. Would prevent major short term losses in revenues.
    - ° On paper would cost 38 million dollars.
    - ° Without changing, it might cost approximatly the same magnitude of dollars and also, totally destroy the already weak industry.

Corrective Action



SEVERENCE TAXES

1. Proper Management of our natural resources.

2. Nothing will happen unless a product, commodity or service is sold for a profit.

3. New Mexico has long-term resources of natural gas, a commodity sold within New Mexico, however, primaril. sold to California.

4. SELLER's MARKET, from 1973 to 1985.

   - ° Commodities in short supply.
   - ° Result: The severence taxes could be added on.

5. In 1986 the market became a BUYER'S MARKET.

   - ° A commoditiy surplus existed.
   - ° Results: An extremely competitive market place.
     - ° No add on taxes passed through.
     - ° Unit price was the major factor in determing the sale price. (pennies included).
     - ° Rules on selling natural gas totally changed into market forces.

Immediate action is required by the New Mexico Legislature and Governor to correct an inequity and unfairness in the levying of Severance Tax on Natural Gas. Gas producers in other states and importers from other countries have a competitive advantage which could cause major loss in market share for New Mexico. New Mexico could lose huge amounts of Severance Tax dollars by not changing to a comparable taxation formula. Citizens of New Mexico have benefited greatly from the Natural Gas Industry. Fair treatment NOW will insure long term positive results without total devastation of the Natural Gas Industry.

FARMINGTON CHAMBER OF COMMERCE MATERIAL

SUBMITTED TO

UNITED STATES ENERGY AND NATURAL RESOURCES COMMITTEE

FIELD HEARINGS

FARMINGTON, NEW MEXICO

MARCH 2, 1987

POSITION PAPER ADOPTED BY THE FARMINGTON CHAMBER OF COMMERCE BOARD OF DIRECTORS

LEGISLATIVE RECOMMENDATIONS REGARDING THE EXTRACTIVE INDUSTRIES

I. The Farmington Chamber of Commerce strongly recommends that the San Juan Basin Legislative Delegation should recommend a percentage formula for assessing severance taxes on the extractive industries of coal mining, gas production, oil production or any other ongoing mining production in the Farmington region or state of New Mexico. In particular the percentage revenues for the sale of natural gas at the wellhead should be competitive with the percentages of other gas producing states such as Oklahoma, Texas and Louisiana.

1. Extractive commodity markets are extremely competitive in California, which is New Mexico's major market.
2. Severance taxes for natural gas in competing states such as Texas, Oklahoma and Louisiana are approximately one half (½) the rate charged by New Mexico; giving these states a strong competitive advantage.
3. Large sales of natural gas or electricity can be lost by small increments in price with catastrophic effects:
    - a. Loss of direct jobs:
        - * affects community business;
        - * affects unemployment payments;
        - * loss of income taxes;
    - b. Loss of severance tax revenues instead of gain;
    - c. Loss of transportation revenues;
    - d. Loss of generation revenues; and
    - e. Loss of liquid extractive revenues and taxes.

II. The Farmington Chamber of Commerce strongly recommends that the San Juan Legislative Delegation should made a resolution to the Federal Government to include purchase of natural gas liquids and natural gas for storage from domestic sources for the strategic petroleum reserve. These purchases would be in addition to or instead of crude oil now being purchased for the strategic petroleum reserve.

III. The Farmington Chamber of Commerce recommends that the San Juan Legislative Delegation recommend industrial development studies be conducted into development of downstream uses and markets for natural gas and natural gas liquids:

- a. Ammonia for fertilizer from natural gas (methane);
- b. Isomerization units for natural gasoline extracted from natural gas;
- c. Manufacture of plastics with ethane feedstock (ethane extracted from natural gas).

1/20/87

PRESS RELEASE
For Immediate Release
Sept.25, 1986

FARMINGTON CHAMBER OF COMMERCE
P.O.BOX 267
325-0279 = Emily Neeland

THE RESULTS OF THE SURVEY SENT OUT BY THE OIL & GAS COMMITTEE OF THE FARMINGTON CHAMBER OF COMMERCE HAS BEEN TABULATED AND RELEASED.

The Committee has made the following recommendations to follow up on their findings:

1. Send the tabulated results to our U.S. Legislators, Senator Domenici, Senator Bingaman and Representative Richardson and to all our State, County and local Legislators and officials.

2. Explore the possibilities of meeting with other Chamber representatives such as Lea County and Hobbs Chambers of Commerce to exchange ideas such as further diversification of our areas.

3. Explore the possibilities of providing Seminars on marketing oil and gas outside of the San Juan Basin.

The Oil and Gas Committee mailed approximately 750 surveys to members of the Chamber of Commerce, other Chambers around the State of New Mexico and lobbyists and gas companies through out the state. There were no responses from out of San Juan County at this time and there was a 10.18% response overall. The breakdown of the type of industry that responded in percentages was: Oil & Gas =28%; Retail =17%; Professional =18%; Agriculture =0%; Construction=7%; and Other =35%.

Of the 10.18% that responded, 17% of their work force had been laid off or taken early retirement. This 17% figure comes very close to the unemployment figure put out by the New Mexico Employment Security Office of 19% for San Juan County.

The second section of the survey asked "what can we do politically?" 74% of the respondants were in favor of some type of import fee or duty on foreign oil and gas; 66% were in favor of total decontrol or deregulation of domestic natural gas; 72% were in favor of repeal of the Windfall Profits Tax; 82% thought the U.S. consumer is being led down the path of trading short-term, low energy prices for long-term loss of energy security and high prices; 75% answered "yes" to the questions: "Should we involve the community (including young people) in a "write the politicians" campaign to tell our needs"? The highest percentage was 92% *that felt* a viable domestic oil and gas industry is vital for national security.

The third section produced one *cohesive* consensus that being 67% were in favor of an advertising campaign to make the California Natural gas market aware of the San Juan Basin's long range supply and value.

# # #

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
525 Camino de los Marquez
Santa Fe, New Mexico
87501

TONEY ANAYA
GOVERNOR

RECEIVED
SEP 5 1986

September 3, 1986

Mr. Russel A. Buss, Chairman
Farmington Chamber of Commerce
203 W. Main
Farmington, New Mexico 87499

Dear Mr. Buss:

I would like to thank you for furnishing the Department a copy of your August questionnaire on the oil and gas issues facing New Mexico and the San Juan Basin. I would be very interested in the results of your survey and I hope you will keep me informed.

While the entire questionnaire is of interest, I must say that questions 3, 8, 9 and 10 are of particular interest. As you may, or may not know, I am Co-Chairman of the Governor's Oil and Gas Task Force which has been empanelled to address such issues as: state aid to the industry; increasing demand for New Mexico oil and gas; and working with the California market and state government. Your findings would be of substantial interest to the Task Force.

Sincerely,

Paul L. Biderman

PAUL L. BIDERMAN
Secretary
Energy and Minerals Department

OFFICE OF THE SECRETARY
(505) 827-5950
ADMINISTRATIVE SERVICES DIVISION (505) 827-5925
CONSERVATION & MANAGEMENT DIVISION (505) 827-5900
MINING & MINERALS DIVISION (505) 827-5970
RESOURCE & DEVELOPMENT DIVISION (505) 827-5900
OIL CONSERVATION DIVISION
(505) 827-5800
Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87501

FARMINGTON CHAMBER OF COMMERCE

OIL AND GAS COMMITTEE

RESULTS OF SURVEY

Mailed:

Members:	678
Other Chambers	18
Lobbyists & Gas Co's.	50
	746

Responses: 76 = 10.18%

I. Oil & Gas	21	= 28%
Retail	13	= 17%
Professional	14	= 18%
Agriculture	0	= 0%
Construction	5	= 7%
Other	23	= 35%
Total	76	

I. 1. Average - 25%
   2. Total 3,149 = 17%
   3. 63% - Yes
   4. 97% - No
   5. 63% - Very Severe

Consensus I: Most people believe we are in a severe recession.

II. 1. 74% - Yes
   2. 58% - Yes
   3. 66% - Yes
   4. 72% - Yes
   5. 51% - Don't Know or No Response
   6. No significant Response
   7. 92% - Yes
   8. 82% - Yes
   9. 75% - Yes
   10. 70% - No response
   11. 60% - Don't know, no response

Consensus II: People are afraid of running out of American oil and gas: it could be a threat to our national security: more people should be educated to this fact.

III. 1. 84% - Yes
   2. No Market = 22%
      No Response = 29%
   3. Taxes = 22%
      No Response = 43%
   4. No Significant Response
   5. " " "
   6. " " "
   7. Diversify - 58%
   8. No response = 65%
   9. No response = 59%
   10. 67% - Yes
   11. Public Information = 24%
      No response = 39%
   12. No response = 81%

Consensus III: We need to have a diverse economic base from which to educate and supply public information in order to have a stable oil and gas industry where a drop in price would not cripple the United States and make us vulnerabl People feel vulnerable when the oil anc gas industry is unstable.
People are in favor of a program to advertise and sell gas in California. How? How to develop a program to sell New Mexico gas in California?

QUESTIONAIRE

August 25, 1986

I. We need to know something about your company. Please indicate by checking the appropriate line.

Oil & Gas 28% (21) Retail 17% (11) Professional 18% (14)

Agriculture 0 Construction 7% (5) Other 30% (23)

Total 76

How has the decline in the oil and gas industry affected your business?

1. What percentage of your business' gross income has declined, if any?

Range was 0% to 100% Average - 25%

2. How many employees have you terminated (early retirement, layoff)?

Range was 0 to 2700. Total was 3,149

And what percent (%) of your workforce does that constitute?

Range was 0 to 100% Average was 17%

3. Do the sales of natural gas and natural gas products from foreign producers (i.e. Canada, Mexico) affect the normal markets you deal with?

YES 48 NO 24 NA
63% 31% 6%

4. Do you feel that the slowdown in the oil and gas industry affect only the companies that service oil and gas accounts?

YES 1% NO 97% NA 2%
1 74

5. What, in your opinion, is the relative severity of the recession?

Very Severe: 63% (48) Moderate: 20% (15) Some impact: 5% (4)

Oil only: 3% (1) No response: 9%

II. WHAT CAN WE DO?

Politically -

1. Are you in favor of an oil and/or gas import fee or duty on foreign oil and gas that would stabilize prices at a certain level?
YES 74% NO 16%
56 12 NA 10%

2. Are you in favor of tax reductions for the New Mexico oil and gas industry to provide additional sources of money as an incentive to conduct further drilling operations?
YES 58% NO 31% NA 11%
44 24

3. Are you in favor of the total decontrol or deregulation of domestic natural gas prices?
YES 66% NO 18% NA 16%
50 14

4. Are you in favor of the repeal of the Windfall Profit Tax on domestic oil production?
YES 72% NO 16% NA 12
55 12

5. Do you feel that the Chamber of Commerce is applying opinion and pressure to the right people who can influence a change?
YES 33% NO 16% NA: 51%
25 12

6. If not, whom should they be lobbying? No significant response.

7. Is a viable domestic oil and gas industry vital for national security?
YES 92% NO 4% NA 4%
70 3

8. Do you think the U.S. consumer is being led down the path of trading short-time, low energy prices for long-term loss of energy security and high prices?
YES 82% NO 12% NA 6%
62 9

QUESTIONAIRE

August 25, 1986

Page 3

9. Should we involve the community (including young people) in a "Write the Politicians" campaign to tell our needs?

YES 75% NO 12% NA 13
57 9

Pertaining to you as a producer: as you know, a potential issue is who pays for the royalties and other taxes. With this in mind:

10. Are you in favor of the New Mexico Legislature passing a law to require the first purchaser of the oil and gas production to pay the royalty interest owners, prior to distributing any production proceeds to the operator of the well or the working interest owners? Yes: 12% (9) No: 18% (14) NA: 70% 5

No significant suggestions

Again, as a producer:

11. Are you in favor of the New Mexico Legislature passing a law to provide protection to the surface owners when oil and gas drilling activities and operations are to be conducted on the land owned by the surface owners?

YES 22% NO 18% NA: 6
17 14

If not a producer, any comments?

No significant comments

III. OTHER THINGS TO DO -

1. Should the Chamber of Commerce's Oil and Gas Committee direct a portion of its efforts to promote the development of San Juan Basin's coal reserves?

YES 84% NO 5% NA: 11
64 4

2. The single most important issue facing the local Oil and Gas industry is:

Regulated
No Market: 22% (17) Diversity: 3% (2) Price 30% (23) Legislation: 4% (3)

Imports: 6% (5) Miscellaneous 6% (5) No response: 29

3. What would you propose for the State to do to aid this industry?

Legislative
Taxes: 22% (17) Regulation: 18% (14) Markets: 6% (5) Nothing: 8% (6)

Other: 3% (2) No response: 43%

4. If modified, what alternate uses are there for your equipment?

i.e. using hot oil trucks for asphalt hauls?

Extent of modification?

No significant response or nothing.

5. What energy industry dependent community in areas that you know of have recovered from a depression (i.e. Grants)? No significant response

6. In your opinion, what are the factors influencing the well head price of gas? No significant response.

7. What do YOU think could be done to stabilize the economy in the area?
Diversity: 58% (44) Change Tax Laws: 4% (3) Stabilize Price: 5% (4)
Miscellaneous: 6% (5) No response: 27%

8. Briefly describe any actions you would suggest to spur the local oil and gas industry. Federal government solution & support: 20% (15)
Oil & gas diversify products and markets: 10% (8) Miscellaneous: 5% (4)
No response: 65%

9. What other "Energy Consuming Business" would you think might be recruited to the Farmington Area? No response: 59% Non-energy consumer: 4% (3)
Retail: 1% (1) Agriculture: 8% (6) Manufacturing 14% (11) Mining: 4% (3)
Miscellaneous: 9% (7)

10. Would you be in favor of an advertizing campaign to make the California Natural Gas market aware of the San Juan Basin's long range supply and value?

YES 67% NO 12% NA 21
51 9

11. In the course of developing this questionaire, the Oil and Gas Committee has observed a lack of educated knowledge and credibility of the oil and gas business as a whole. What steps could be taken to reduce this credibility gap? Education seminars: 18% (14) Public information: 24% (18) presentations: 10% (8) Community involvement: 3% (2) Miscellaneous 6% (5)
No response: 39%

12. Other suggestions:
Share information: 9% (7) Other industry: 5% (4) Oil and Gas Contribute to Economy: 5% (4) No response 81%